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W E E K L Y R E P O R T S

Of the Offices of

WESTERN IRRIGATION AGRICULTURE

And

DEMONSTRATION ON RECLAMATION PROJECTS

Vol. XXV

July 5, 1924.

1

Western Irrigation Agriculture

Newlands

The meteorological data recorded at this station for the period ending June 30 follows:

Mean maximum 93.1, maximum 100 on the 29th; mean minimum 47.3, minimum 44 on the 26th and 27th; precipitation none.

The work at the station has consisted of hoeing beets, cultivating corn and stacking the first cutting of hay. As soon as the first crop of hay had been stacked, a general irrigation was given the farm. All plats were irrigated with the exception of D8 and E1, 2, 5 and 6.

The following table gives the yield of the alfalfa plats for the first cutting.

E. W. Knight.

Scottsbluff

The average maximum temperature for the week ending June 28 was 85 with a maximum of 97 on the 27th, on which day there was an exceedingly hot wind; the average minimum was 55 with a minimum of 46 on the night of the 27th--the hot wind of the day changing to a cold one about 6 P. M. There was no rainfall during the week.

Water was run continuously throughout the week. All the grain plats in Field K, the barley in Plat IV in Field A and II, IV, V and VI in Field C and the grass pastures in Field B were irrigated.

The haying equipment was overhauled and repaired and the first crop of alfalfa was cut and placed in shock.

The weather is ideal for haying and the first cutting is pretty well along all over the project and is going into the stack in good condition.

James A. Holden.

Demonstrations on Reclamation Projects.

Belle Fourche

For the week ending July 5, parts of two days were spent in the field, investigating injury due to the work of the sugar-beet webworm and in furnishing and preparing a poisoned bran mash to combat the worms. The formula recommended by the State College and used very successfully for several years by county agent Ellison is as follows:

Belle Fourche (continued)

Wheat bran, coarse flaked	100 pounds
Arsenic cr' paris green	4 "
Low grade or black strap molasses	2 gallons
Amyl acetate	3 ounces
Water	15 gallons

The poison usually arsenic is thoroughly mixed with the bran. Then the molasses diluted with the water containing the amyl acetate is added to the bran making a moist bait but not sloppy. The above material is enough for 8 acres and is very effective for both grasshoppers and worms. As a worm bait it is spread in the evening. For hoppers, very early in the morning is the best time.

Serum and virus for cholera vaccination was ordered for one farmer. Milk samples were gathered at two farms and butterfat tests run. One community meeting was attended. Plans have been made for two club tours and one club meeting the coming week.

Butterfat is worth 34¢ on the project. Graded No. 1 eggs 21¢, No. 2 eggs 16¢ and ungraded eggs 15 and 16¢.

Frank E. Miller.

Flathead

Weather continues cool for the week ending June 28. Small grain crops are apparently in good condition, with prospects for a very good crop. Corn is backward. Haying is nearly completed in some parts of the project, with a somewhat less than normal yield.

Considerable time this week was put on the community picnic to be held on the project. This picnic is being put on by the Lake County Affiliated Organizations. Plans provide for a full day program and accomodations for at least 2,000 people. Assistance was given local committees in Polson and Ronan in soliciting funds for the picnic. A press article was prepared on the picnic.

Some time was also devoted to the meeting of the Lake County Affiliated Organizations, and on the fair proposition which is also being handled through this organization.

Further arrangements for the Farm Tours were also made and a meeting held with a committee from the L. C. A. O. appointed to assist in the tours.

A Red Poll heifer calf was delivered to a club member, and three other calf club members were visited.

Irrigated pastures were considered at length at a joint meeting of Holstein and Guernsey breeders association and the Valley Farm Bureau. A local farmer who has done much along this line was secured to exhibit grasses and to give his experiences and conclusions on irrigated pasture mixtures. Irrigated pasture grasses were prepared for office exhibition. Four milk tests were made. Cream prices were the same as last week.

Flathead (continued)

The weather was hot for most of the week ending July 5 climbing to 95 degrees for several days. Haying is practically completed. Some of the wheat is beginning to show some ripening.

Most of the week was used in connection with the Lake County Picnic held on the 4th of July. Plans were made to provide for 2,000 people, but 4,000 were in attendance, and seemed well pleased, except for a shortage of water for time, due to the large crowd. This was remedied though and the general impression is that it was a very successful picnic.

One dairy calf club was attended and a farm tour and community picnic participated in the fore part of the week.

One day was used in connection with the farm tours.

Butterfat and eggs remain as last week.

L. B. Miller.

Minidoka

A large part of the agriculturist's time for the week ending June 28 was spent making arrangements for farmer's picnic to be held at Burley July 3. The program includes dairy judging contest on two classes of cows, one Holstein and one Jersey, addresses by County Agent Barber of Cassia County, the agriculturist, president of the University, and C. C. Moore, Governor of the State of Idaho. The latter part of the afternoon is to be devoted to a baseball game between the farmers on the North and South sides of the project. The evening program includes a dance which is given by the members of the project Holstein Friesian Association. It is planned to make this picnic an annual affair.

A sale of dairy cattle the first of the week which were brought in from the north side of Twin Falls Project, realized very good prizes. This indicates a healthy interest in dairy development.

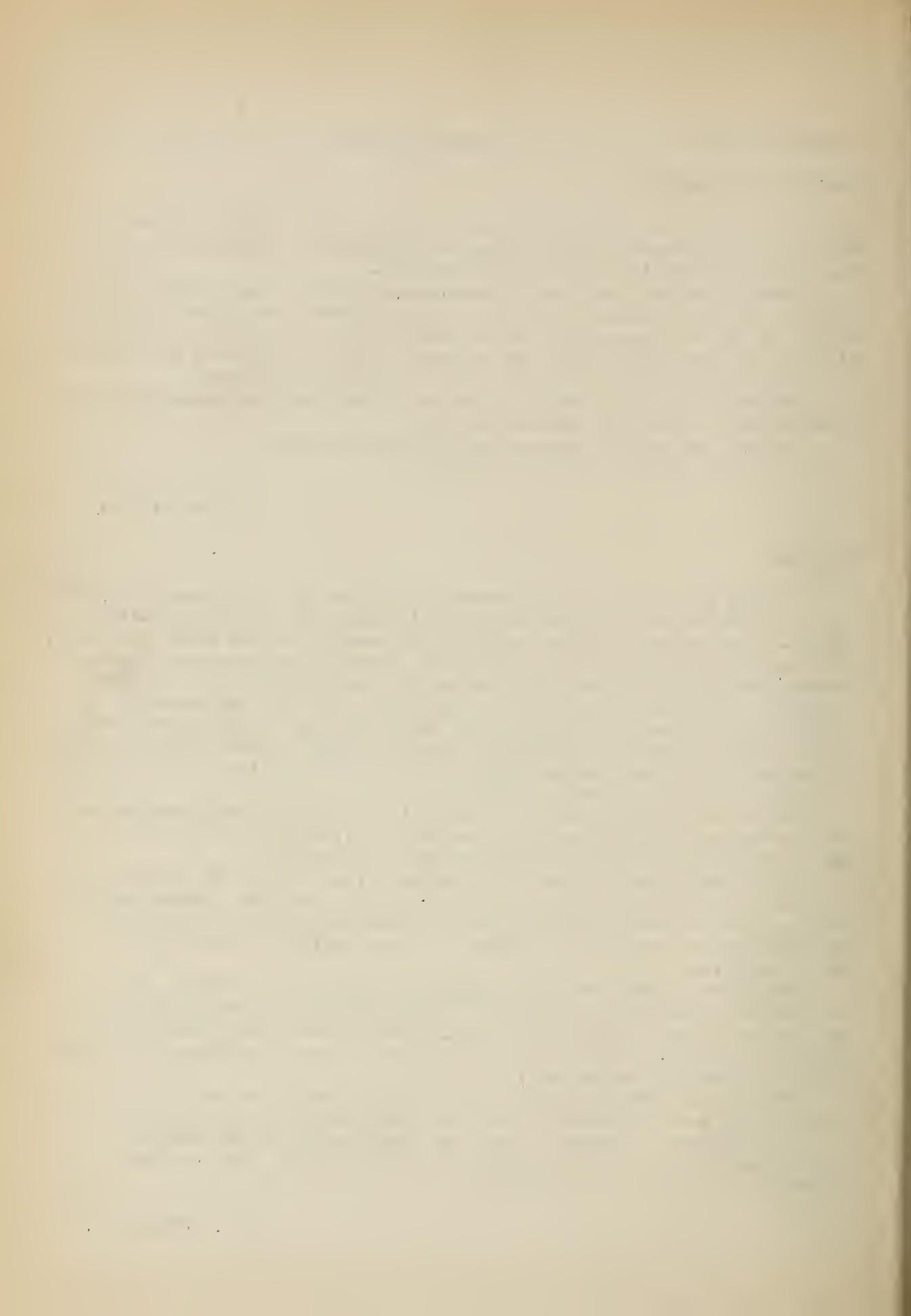
The agriculturist directed the dipping of two flocks of poultry in sodium chloride solution for control of lice. He also sprayed alfalfa along a piece of corn with Paris Green Starch Solution to destroy the grasshoppers, attempting to minimize the destruction of corn by this border spraying.

Continued reports on field spraying ten days before cutting for alfalfa weevil are most favorable to this method of combatting the pest. One farmer reports eighty acres saved, which he says would have been an almost total loss. Three acres were left for a check and almost destroyed by the time the hay was cut.

White flies have destroyed a few pieces of beets on this project. Considerable loss is reported from Twin Falls Project.

The weather is extremely warm, some old timers say the warmest weather that has ever been experienced on the project, but corn and potatoes and beets are growing fine.

J. T. Montgomery.



North Platte

A couple of days of the week ending June 28 were spent in the west end of the project. In company with P. H. Dupertuis, county agent of Goshen County, Wyoming, dairy farmers near Fort Laramie were visited and some assistance given in the selection of herd sires. Ex-service men near Veteran, who are using a bull loaned to them by the Experiment Farm, were visited and data obtained from the keeper of the bull.

Most of the settlers in the Fort Laramie unit now have cows to provide milk for their families and many of them are selling cream. Keepers of the stores in the small towns of Veteran and Huntley report that they have sold but very little "canned" milk in the last year, whereas two years ago they sold a great deal of it to the new homesteaders. No importation of dairy cows has been made into the territory but the settlers are milking whatever cows they can obtain locally and are endeavoring to build up their herds by the use of dairy bulls.

At the request of Mr. M. B. Quivey, who owns a 60-cow dairy near Mitchell, 25 red cows were culled out of his herd to be shipped to the Denver market. Mr. Quivey recently added two purebred Holstein cows to his herd and is now using a Holstein bull.

Boys' and girls' club activities during the week included a meeting of the Sunflower calf club. The president of the club earned a trip to the State Club meeting held at Lincoln the first week of June. He just returned from the conference and gave an interesting report of the trip.

Mr. Summers, poultry specialist from Lincoln, was in Scottsbluff county the last of the week in the interest of poultry clubs.

D. H. Propps.

Uncompahgre

A trip was made during the week ending June 7 with the leader and members of the Frost Pig Club to the farm of Clements and Clements in Delta County to secure pigs for some of the members. Weaner pigs weighing up to 70 pounds were purchased at \$10.75 each including registration papers. Pigs were delivered to the members. Instruction was given members in hog judging.

A peculiar case of sore feet in hogs accompanied by other symptoms which caused the owner to fear foot and mouth disease was investigated with Dr. Griffiths, local veterinarian. Several sows were suffering from acute inflammation of the coronet which made them unable to walk. There were no symptoms of foot and mouth disease.

One visit was made to a poultry breeder to advise regarding feeding, culling, etc. Several short articles were written for local papers. The last two days of the week were spent enroute to and in attendance at the National Guard Encampment at the State Rifle Range near Denver, the Demonstration Agent being in command of Headquarters Company of the 1st Battalion, 157th Infantry, Colorado National Guard.

The entire week ending June 14 was spent in attendance at the National Encampment, State Rifle Range near Denver.

Monday of the week ending June 21 was spent in Denver in conference with Messrs B. E. Hayden and D. W. Davis of the Bureau of Reclamation, the State Veterinarian and Dr. Howe of the Bureau of Animal Industry. Mr. Hayden had written

Uncompahgre (continued)

written Project Manager Foster in regard to the establishment of cheese manufacture on the Uncompahgre Project, asking for information relative to the dairy industry here, and an appointment was made with him at Mr. Foster's request. The State Veterinarian and Dr. Howe were consulted with respect to the extension of the tuberculosis eradication area in this section.

The remainder of the week was spent on military leave.

H. A. Ireland.

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WEEKLY REPORTS

Of the Offices of

WESTERN IRRIGATION AGRICULTURE

And

DEMONSTRATIONS ON RECLAMATION PROJECTS

Vol. XXV

July 12, 1924.

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San Antonio

The period covered by this report, May 11 to June 21 was characterized by wet weather. During the 18 days from June 2 to June 19, inclusive, no precipitation occurred, but due to the abundant rainfall preceding this time, none of the crops suffered for moisture. Dry-weather cracks appeared in sorghum, corn and alfalfa fields just prior to the rain which started June 20. A summary of the meteorological data recorded at the station is given below.

Week ending	Temperature				Date	Precipitation	
	Maximum	Minimum	Mean	G.D.R.		Inches	
May 17	: 83	: 52	: 64.9	28	May 13	:	.06
	:	:	:		May 14	:	1.20
May 24	. 92	: 61	. 74.6	31	May 15	:	.01
	.	:	:		May 20	:	.12
May 31	.	:	:		May 21	:	.16
	.	94	: 64	. 78.2	May 25	.	2.12
June 7	.	:	:		May 26	:	.02
	.	:	:		May 28	:	.02
June 14	.	:	:		May 29	:	.36
	.	96	: 68	. 84.0	May 30	:	T
June 21	.	:	:		June 1	:	2.04
	.	:	:		...	:	None
	.	:	:		June 20	:	.20
	.	98	: 69	. 83.0	June 21	:	<u>3.83</u>
					Total	:	10.14

The heavy demand by farmers for labor to catch up with their work during the comparatively short period which was favorable for field work and the high wages offered cotton choppers north of San Antonio, made it difficult to obtain hoe hands and Johnson grass and weeds have gained quite a start on the station.

All small grains and flax plantings (except the two last plats in the "Time of Planting" test) were harvested, and all were threshed except the Flax Variety and Time of Planting Flax test during the period of dry weather. Oat yields from the rotation plats were the highest of record, ranging from a minimum of 29.9 to a maximum of 74.8 bushels per acre with an average of 56.6 bushels per acre. Selection 1913 oats planted at the south end of fields B3 and C3 yielded at the rate of 77.6 bushels per acre. Very good yields were harvested from the oat varieties in the Small Grain

San Antonio (continued)

Variety test in spite of the fact that that planting was not made until December 31, 1923 and all varieties rusted much worse than the oats in the rotation plats. The following table shows the yields of small grains threshed.

Crop	Variety	Location	Grain	Straw	Wt. per bushel (tons): machine cleaned
			(bushels)	(tons)	
ROTATIONS					
Oats	Texas Red Rust Proof A4-6		62.1	1.21	28
"	" " " "	-12	71.5	1.24	28
"	" " " "	-16	72.4	1.22	28
"	" " " "	A5 -o	72.1	1.39	25
"	" " " "	12	36.4	1.06	24.5
"	" " " "	16	29.9	1.03	25
"	" " " "	A5-15	34.1	0.90	23.5
"	" " " "	B5 -8	74.3	1.63	28
	Small Grain Variety Test				
Oats (check)	Texas Red Rust Proof B4-2		60.8	1.40	25
"	Selection 1913	-3	65.0	1.20	26
"	Texas Red Rust Proof	-4	70.3	1.33	25.5
"	Ferguson #71	-5	63.1	1.18	25.5
" (check)	Texas Red Rust Proof	-6	60.9	1.15	26
Rye	Texas Winter	-7	20.0	1.20	52.5
"	Rosen	-8	9.5	.88	47.0
Oats (check)	Texas Red Rust Proof	-9	58.1	1.13	26.0
Barley	Texas Winter	-10	29.2	.88	40.0
"	Hannchen	-11	42.7	1.23	45.5
"	Stavropol	B4-12	32.1	.95	30
"	Tennessee Winter	-13	20.3	1.25	36.5



San Antonio (continued)

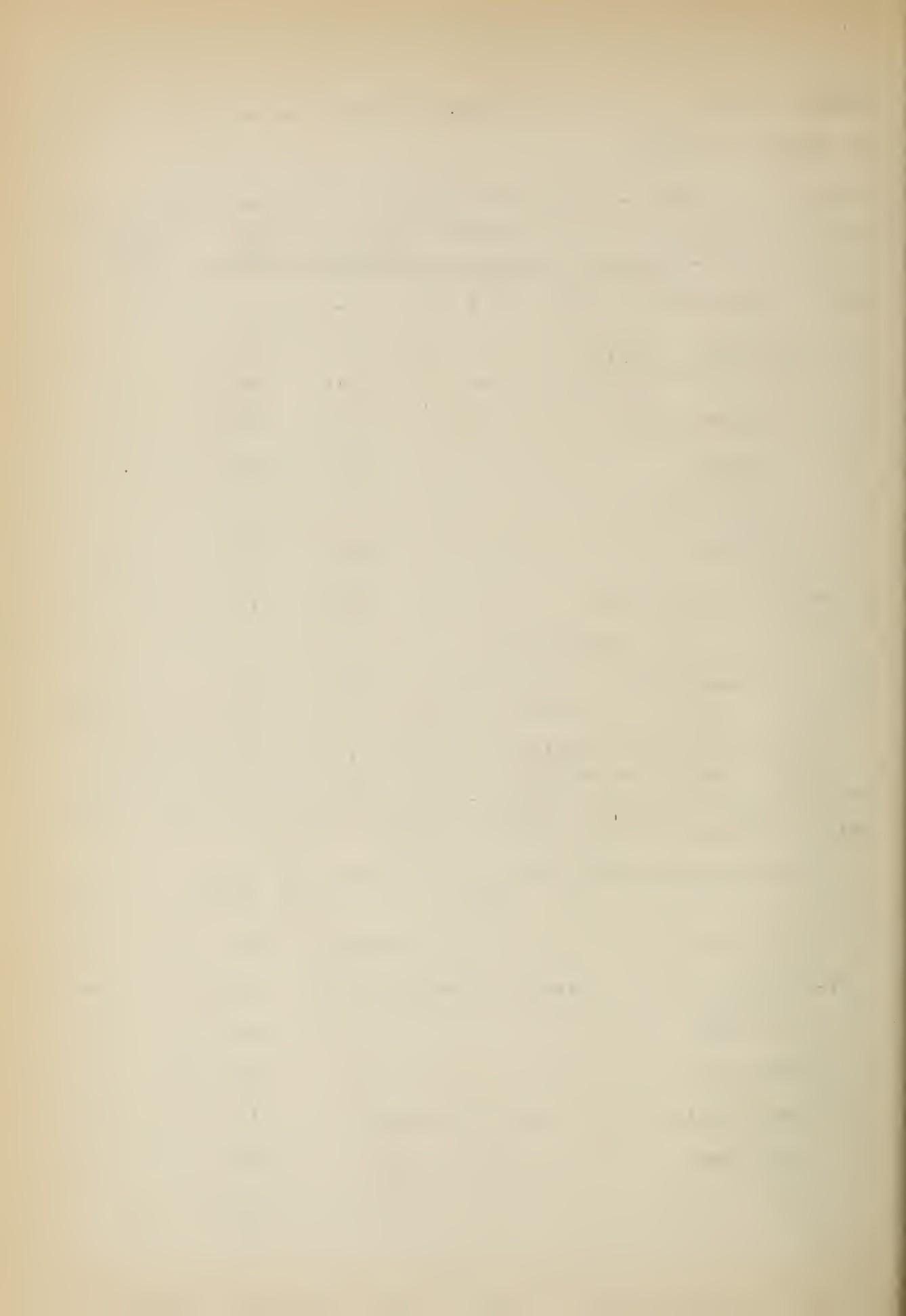
Crop	Variety	Location	Grain (bushels)	Straw (tons)	Wt. per bush. machine cleaned
Small Grain Variety Test					
Barley	White Club	-14	.4.2	.73	33.5
"	:	:	:	:	:
Oats (check: Texas Red Rust)	Proof	-15	51.9	.50	28.0
"	:	:	:	:	:
Wheat	Meditteranean	-16	1.3	.86	35.0
"	:	:	:	:	:
"	Kubanka	-17	23.0	1.90	57.0
"	:	:	:	:	:
"	Early Baart	-18	10.3	1.65	39.0
"	:	:	:	:	:
"	New Way	-19	23.7	1.75	58.0
"	:	:	:	:	:
Oats (check. Texas Red Rust)	Proof	-20	44.7	.95	27.0
:	Miscellaneous	:	:	:	:
Oats	Selection 1913	B3, C3	77.6	2.59	29.0
:	:	:	:	:	:

In addition to the harvesting and threshing, farm work accomplished during the period has included the cultivation of all row crops, orchards, and fallow land, mowing of roads and waste areas for weed control, spraying of orchards and vineyards, chopping of weeds and Johnson grass, thinning cotton, and repair of buildings and equipment.

The following Department officials have visited the station:

	<u>Office</u>	<u>Arrived</u>	<u>Departed</u>
Mr. H. F. Schutz	Bu. of Agric. Economics	May 21	May 21
Mr. A. D. Martin	Crop Acclimatization	May 24	June 6
Dr. O. F. Cook	" "	June 6	June 6
Mr. Walter Clark	" "	June 6	June 6
Dr. Geo. L. Peltier	(Cotton rootrot)	June 16	June 21
Mr. R. D. Martin	Crop Acclimatization	June 19	.....

Geo. T. Ratliffe.



Scottsbluff

The average maximum temperature for the week ending July 12 was 84 with a maximum of 90 on the 6th and 7th; the average minimum was 54 with a minimum of 45 on the 9th. The precipitation was 0.69 inches, coming in 4 showers. This brings the total precipitation for the growing season (since April 1) to date to 3.98 inches as compared with a 12-year average of 7.37 for the same period.

Water service was resumed the first of the week and the beets in Fields A, D and K have been irrigated. The experimental plats of potatoes in Field E were also watered. All of the beet, potato and corn plats were cultivated during the week. The harvesting machinery has been overhauled and placed in condition for work. The grain is beginning to ripen.

Saturday evening there were good rains in a number of localities over the project--not a general rain but in the places where it was needed the most.

James A. Holden.

Demonstrations on Reclamation ProjectsBelle Fourche

During the week ending July 12 two club tours were conducted; one to Belle Fourche, and one to Spearfish. County agent Ellison, and club leaders attended the tours which were interesting and instructive. Much appreciation is due to local people for the use of their automobiles as five were required to carry the boys and girls. The Project Ayrshire club held its monthly meeting on Wednesday. Mr. J. C. Holmes of the State Marketing Department and a livestock specialist gave material assistance in judging contests and demonstrations.

Serum and virus were ordered for two farmers for cholera vaccination. Hog cholera has caused almost a negligible loss on the project this spring. Encouragement is given to continue vaccination by ordering the serum and virus from the serum companies and delivering it at cost.

Two articles were prepared for publication. Milk samples gathered and tested for one registered Ayrshire breeder and nearly a day was spent in the field in advising the use of the poison bran mash to combat the sugar-beet webworm.

Frank E. Miller.

Minidoka

The event of largest local importance for the week ending July 5 was the first annual farmers' picnic held at Burley and sponsored by the Mini-Cassia Holstein Friesian Association. This was an all day picnic, consisting of some athletic events and a somewhat formal program in the afternoon. President Upham of the University of Idaho and Governor Moore were the chief speakers on the program. Other addresses were made by County Agent Barber, W. B. Kjosness, State County Agent Leader and the agriculturist. Attendance was about three hundred and fifty. A Black and White Dance was the feature for the evening's entertainment and was well attended. The proceeds from the dance i

Minidoka (continued)

financed the day's entertainment. Free milk was served with the picnic dinner. This club has given away milk on various occasions of this kind for three or four years and has proved a very good advertisement.

Two classes of dairy cows, one of Holsteins and one of Jerseys, were judged and picnickers showed marked talent in judging dairy cows. The management felt that the day's attendance was not large enough but others thought it was very good for the first attempt. Something was learned about handling affairs of this kind which should prove profitable later.

Crop situation on the project continues about as reported last week. Very warm weather is favorable to the growth of corn and peas. The second cutting of alfalfa is coming on very well.

J. T. Montgomery.

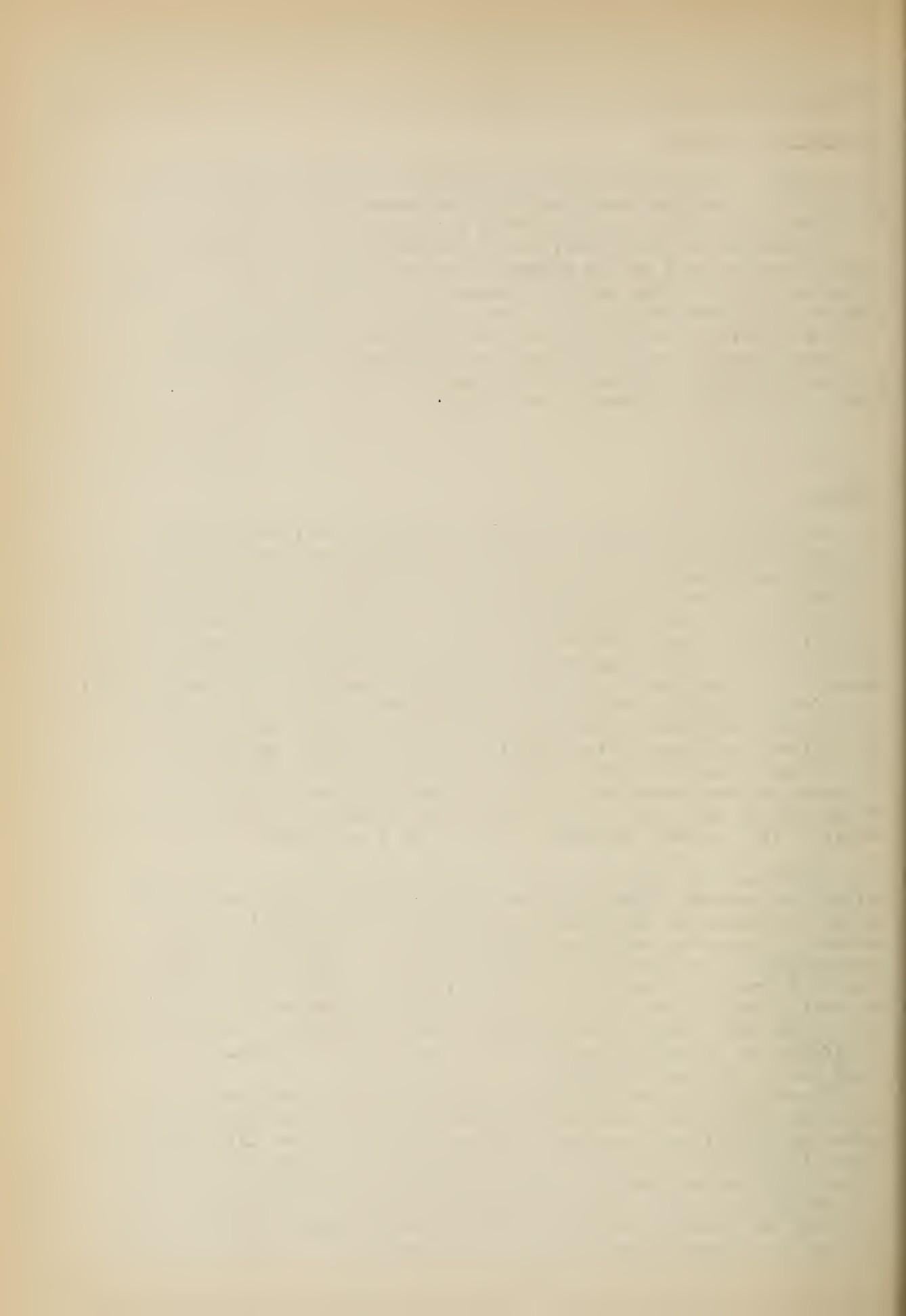
Newlands

During the week ending June 28 the alfalfa hay harvest has been the principal activity on the project. Very excellent crops are being harvested throughout the project, and the harvest is about ten days earlier than usual. Labor has been ample at \$2.50 to \$3.50 per day and board.

Up to the present time there has been no sales or contracts for the disposal of this year's alfalfa hay crop, and no definite price has been advanced so far. The local farmers having hay to sell are in considerable suspense as to the possibilities of marketing this year's surplus hay crop. It is anticipated that there will be ample demand for the hay of this valley at a good price in spite of the fact that we are unable to ship hay to California, because of the alfalfa weevil quarantine against us. One article was prepared for the local press, covering these points. The following are the prevailing prices for farm products on the Newlands Project during the month of June. eggs, 28 $\frac{1}{2}$ cents, butterfat 42.2 cents, lambs, 10 to 12 cents, fat cows 5 cents, hogs 7 cents, hay no sale.

On Tuesday and Wednesday of the week ending July 5 a trip was made through the Carson, Smith and Mason Valleys, together with three other valleys including the Newlands project which is the largest, for the purpose of observing agricultural conditions with special reference to the possibilities of the surplus alfalfa hay supply. This trip revealed the fact that these other valleys will be very short of irrigation water for the rest of the season, and that there will be no surplus hay for sale in these districts. This is very important as it effects the demand and price of alfalfa hay on the Newlands project. An article was prepared for the local press, covering this trip.

The foot and mouth quarantine, which has been maintained by this county on nearby California counties, in addition to the regular state quarantine was lifted during the past week. This action will permit the importation of cattle and sheep from nearby California points into this valley, for feeding purposes. This is a very welcomed move by Newlands project farmers, since it opens up possible markets for local hay. The adjoining California counties east of the Sierra Nevada mountains are very dry and very short of feed, and the Newlands project has the principal



Newlands (continued)

surplus alfalfa hay accessible to these districts. A good demand for hay to be fed on the project is expected any time now. sickness of

The dairy herd testing work for June suffered some delay on account of the tester. This delay was overcome by the end of the month, by employing extra help. On the third of July a new tester commenced work from Northern Arkansas. He drove through and reached here in time to begin the July test. For the past three months, it has been necessary to employ temporary help for the testing association work, because of the suspense caused by the foot and mouth situation in California. Many of the dairymen were afraid it would be necessary to discontinue testing work because of the danger of spreading the disease from one ranch to another in case it entered this valley. However, we were able to continue without interruption throughout the summer, and should close up our second year's testing in good shape by the first of September.

North Platte

During the week ending July 5 four herds of hogs were vaccinated. No new cases of cholera were reported but most breeders of pure bred stock are keeping their herds immunized. At the request of owners, sick hogs were examined on two farms near Mitchell. Symptoms of cholera were not present.

Eben D. Warner, President of the North Platte Valley Telephone Co., had trouble with his dairy cows bloating on new alfalfa. The whole herd was off feed and some of the cows bloated on anything they ate. A few doses of aromatic spirits of ammonia and oil of turpentine, together with careful feeding soon corrected the trouble. Mr. Warner has a 2-year-old heifer out of the recent shipment from Lincoln that was producing from 61 to 64 pounds of milk a day on 3 milkings and with very ordinary care.

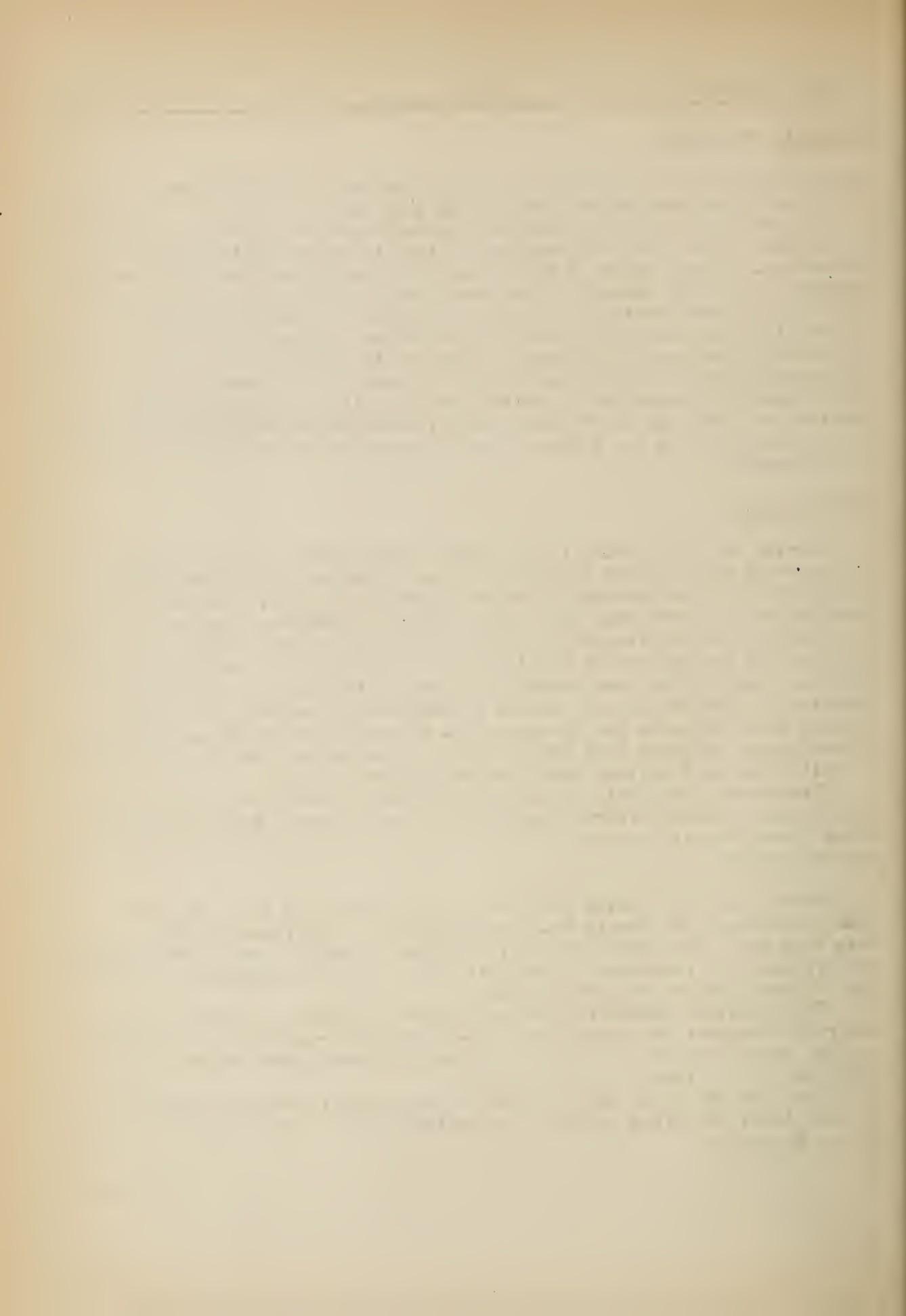
Professor Allen Cook, the new Smith-Hughes teacher in the Sunflower Consolidated School, arrived this week and will assume charge of the live-stock clubs in that district. Part of one day was spent with Mr. Cook calling on club members.

During the week ending July 12, a premium list for boys and girls club exhibits at the County Fair was outlined. In cooperation with Miss Henderson, the Home Demonstration Agent, a complete new classification was arranged and presented to the Fair Board. The club exhibits this year will be much larger than ever before.

Three culling demonstrations were given near Henry. There is considerable interest in culling just now. The early moults are beginning to lose their feathers and other hens that are poor layers might well be marketed at this time.

The week continued dry with only a light shower Saturday evening. Up to this time, the precipitation this spring has been only about half as much as the average.

D. H. Proops.



Shoshone

The week ending July 12 has not been unfavorable for haying with several light showers. Some fields are yet cut, although the alfalfa is in full bloom. Hay is badly bleached and a part of it will not be marketable.

Potato bugs have been hatching rapidly and nearly all fields have been sprayed. The majority of the farmers have been using Paris green and with the frequent showers it has not been very effective. Several complaints were received that the poison was not killing the bugs and it was assumed by some of the farmers that it was due to the poor quality of the poison used. It is possible that this had something to do with it, but the poor results obtained were due in part at least to a too light application. Several were using only 1 pound per acre without much effect but good results were obtained by using 2 pounds.

O. J. Grace.

Uncompahgre

Milk tests were run on nine herds on Monday of the week ending June 28. In this work, assistance was given by a dairy club boy who is keeping a record on his father's herd as part of his club work. Samples were collected and tested in the agricultural room of the high school. 64 samples were run.

One and a half days were spent on work in connection with the fair premium list, revising schedules, reading proof, etc. The premium list is ready for publication.

Several livestock breeders were visited with Mr. King to arrange for the exchange of purebred sires for scrubs or grades on July 9th. Breeders of purebred stock are more willing to cooperate in the matter than owners of scrub males. Requests so far received are from owners of grade males that are not poor enough to make a good demonstration. Much publicity is being given the event.

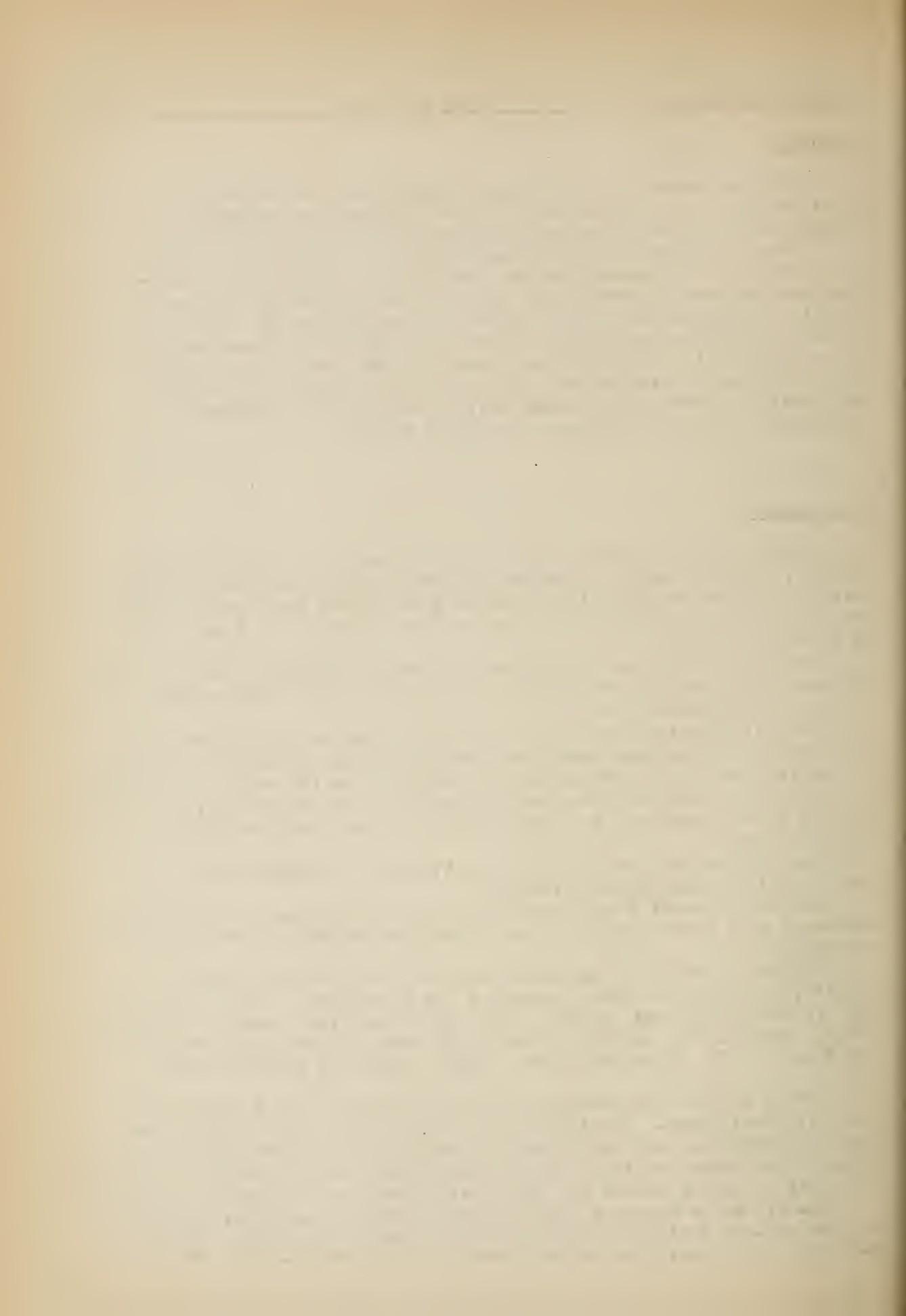
One club meeting and program was attended. A poultry man was visited and a culling demonstration arranged.

Two car loads of Jersey cows and heifers shipped in from Texas were inspected with a man wishing to buy. They are inferior stuff and were not recommended.

Markets: The following quotations are given for the week:
Alfalfa, New \$6.00 to \$8.00; butterfat 32 & 35 cents; barley \$1.65 cwt.;
Eggs 17 cents, 20 cents trade; corn, \$1.85 and \$2.00; Oats, \$1.25;
wheat, \$1.60-\$1.85; chickens, hens 12-15 cents, Springs 25 cents; cattle
top Denver \$8.75; sheep, top Denver \$13.25; hogs, top Denver \$6.90.

Monday of the week ending July 5 was given to a stock judging trip with livestock clubs. A letter had been sent to all members and local leaders giving the time and place of meeting. Some of the members rode on horseback 12 miles to attend. Work will be done on all classes of livestock this year including horses and sheep which have not been handled previously.

Two flocks of hens were culled. One contained 112 head, largely June hatched pullets last year, nearly all of which were culled. This flock had been fairly well fed but was producing very poorly. The other flock



Uncompahgre (continued)

consisted of all March hatched birds nearly half of which were two years old, and was reduced to make room for pullets which are already almost mature. Of the two-year-old hens half were left in the flock.

The rest of the week was mostly taken up with work in connection with a picnic and program planned for July 9th at which a number of livestock breeders have offered to trade purebred males for grades or scrubs.

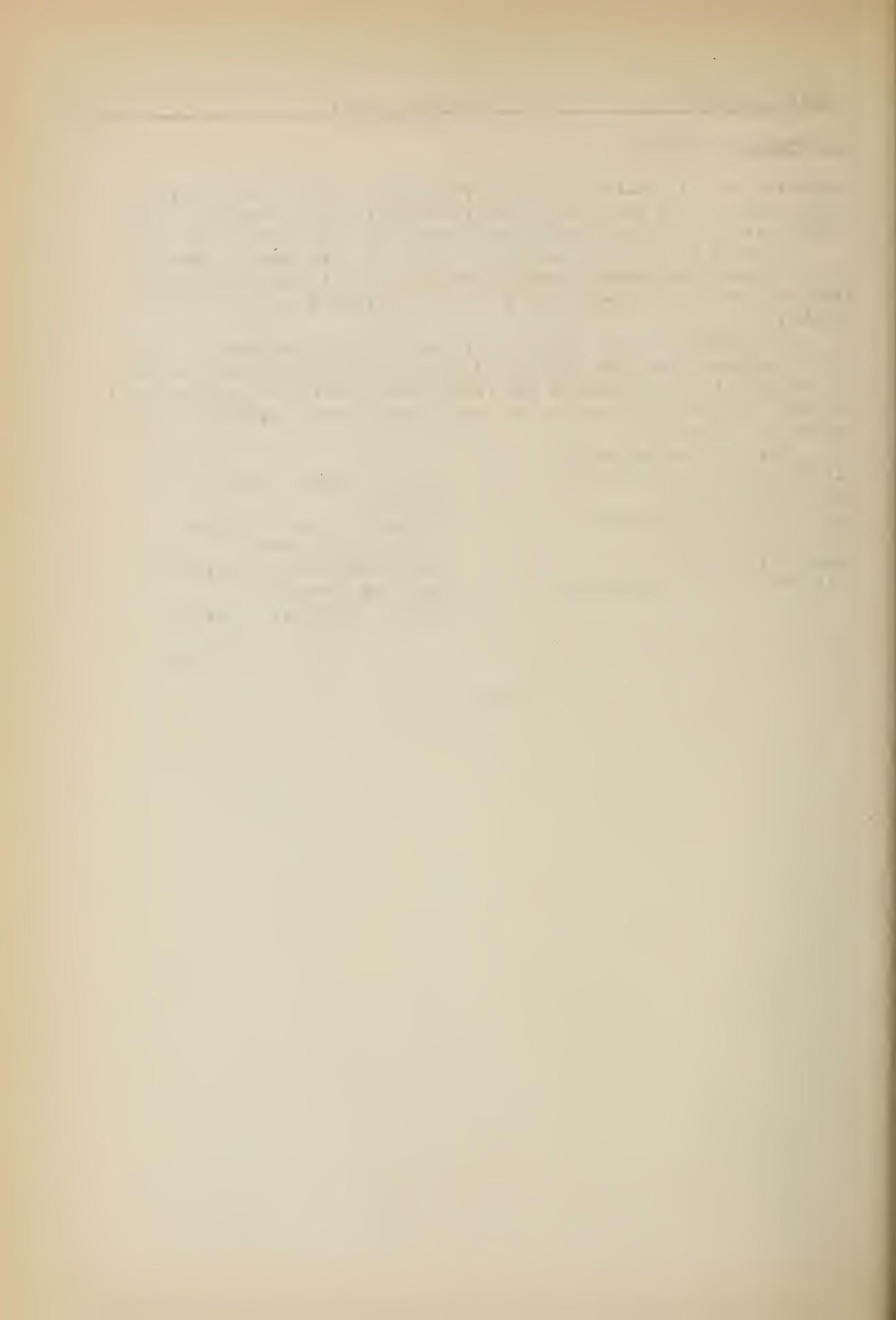
Some difficulty is being experienced in finding owners of scrub bulls and boars who are willing to part with their animals or take the trouble to bring them to the fair grounds where the exchange will be made. So far only two trades have actually been arranged with two others in prospect.

Markets for the week:

Alfalfa hay, new	\$6.00 to \$8.00 ton.	Eggs, 20 cents a dozen
Barley,	\$1.65 cwt.	Chickens,
Corn,	\$1.85 to 2.25 cwt.	hens, 11 and 15 cents
Oats,	\$1.75 cwt.	springs, 20 cents
Wheat,	\$1.85 "	Beef cattle, top Denver \$8.25
Butterfat,	32-35 cents a pound	Hogs, top Denver \$6.85
		Sheep, top Denver \$13.75.

H. A. Ireland.

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W E E K L Y R E P O R T S

Of the Offices of

WESTERN IRRIGATION AGRICULTURE

And

DEMONSTRATIONS ON RECLAMATION PROJECTS

Vol. XXV

July 19, 1924.

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Huntley

The maximum temperature during the two weeks ending July 19 was 100, minimum 42, and precipitation .43 inch.

Favorable weather conditions prevailed during this period and most crops are in good condition. Sugar beets and other cultivated crops were given the first irrigation. The harvest of first cutting of alfalfa was completed. Yields of this crop were fair and the hay was gathered in good condition and was not damaged seriously by rains.

Mr. J. M. Stephens of the Office of Dry-Land Agriculture visited the station on July 10.

Yields of first crop alfalfa in the irrigated rotations were as follows:

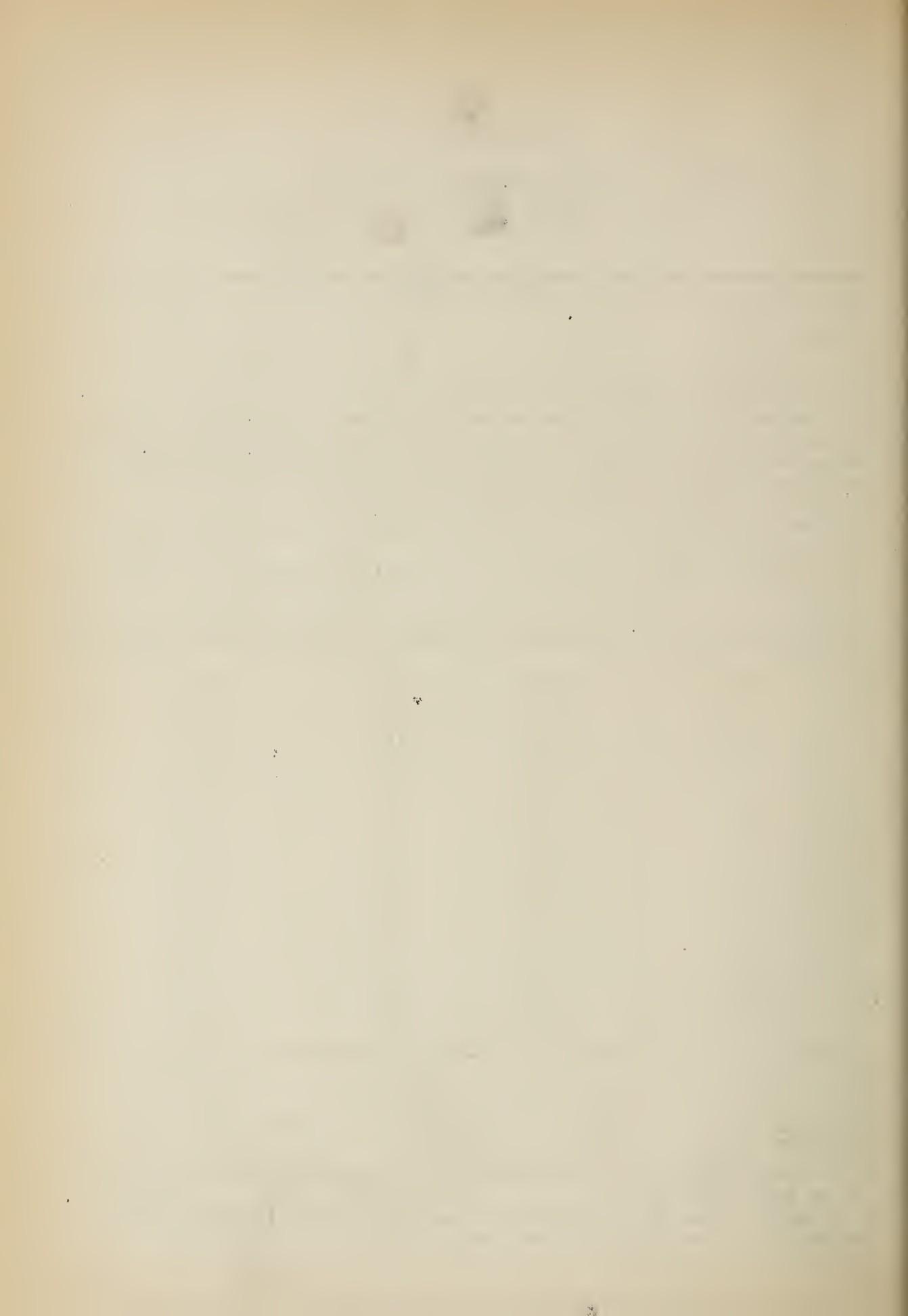
Rotation Number	Plat Number	Pounds per Plat	Tons per Acre	Age Years
67-E	K-II-2	1390	2.78	2
61-E	-III-2	1190	2.38	2
61-F	-III-3	1645	3.29	3
60-E	-III-8	1220	2.44	2
60-F	-III-9	1460	2.92	3
40-D	- IV-2	1180	2.36	2
42-D	- IV-8	990	1.98	2
44-D	- IV-12	1110	2.22	2
8-A	- IV-22	970	1.94	12
46-B	L- IV-12	1160	2.32	2
46-A	- IV-13	480	0.96	1
8-A-a	- IV-14	1220	2.44	8
64-F	- IV-15	1210	2.42	2
64-E	- IV-16	310	0.72	1
64-A	- IV-20	1290	2.58	3
69-F	- IV-22	1260	2.52	2
69-E	- IV-23	300	0.60	1

Dan Hansen

Newlands

The meteorological data recorded at this station for the period June 30 to July 14 follows:

Mean maximum 94, maximum 100 on June 30, mean minimum 55, minimum 43 on the 13th. Precipitation was a trace on the 3rd, 5th and 11th.



Newlands

The work at the station has consisted of hoeing beets, cultivating corn, and mowing the ditch banks. There has been one irrigation given. The plots irrigated were all of B except 7, 8, 9, and 10; all of C; all of D except 1 and 5; all of E except 1, 2, 7 and 8; all of F except 6; all of G; all of H; and Y2 to 13 inclusive.

Mr. Weeks and Mr. Hill of the University of California, Mr. Stewart of the University of Nevada, and Mr. Headley have been engaged during the past several days in the investigations being held regarding the proposed Spanish Springs Project.

The investigation consists of a soil survey and land classification, determining the type of farming best adapted to the various units, estimates of costs necessary to place the farm units in a stage of production, marketing questions, and in fact, a thorough consideration of all the factors that will determine ultimately the wisdom of building or not building the additional storage unit.

E. W. Knight.

Scottsbluff

The average maximum temperature for the week ending July 19 was 84 with a maximum of 94 on the 15th; the average minimum was 58 with a minimum of 52 on the 14th.

The week has been dry at this station. There have been local showers--some good ones--in various parts of the project. With the exception of sugar beets, crops are in very good condition and making good growth. According to the estimate of the Nebraska division of crops, the condition of sugar beets is given as 82% of normal as compared with the 10 year average of 89.1. The estimate for the United States in this crop is 81% of normal showing that the condition in Nebraska is slightly better than for the country as a whole. The acreage in Nebraska is 67,000 for 1924 as compared with 58,000 acres harvested last year. This will give an estimated production of 624,000 tons as against 640,000 tons last year.

The work for the week at the station has been the cultivation of all beet, corn and potato plots and the irrigation of grain and alfalfa plots.

James A. Holden.

Yuma

The maximum temperature for the six-weeks period ending July 12, was 113; the minimum temperature 54.0; the greatest daily range, 51.0; precipitation .02.

During the month of June there were only five days in which the temperature did not reach 100 or above. The nights during this same period have also been exceptionally warm. And for the past two weeks with summer rains in the surrounding territory, the humidity has been relatively high. This kind of weather means that the cotton began shedding early and in many locations there is an appearance of an over-growing condition. So far favorable conditions have prevailed but the threatening showers are causing some concern. While there is very little hay on the project that is being

Yuma

marketed, it is reported that prices are ranging around \$18.00 per ton baled f.o.b. cars Yuma, with prospects of still higher prices in the fall.

The period for high water in the Colorado River has passed with no danger or damage from floods. In fact, the high water this year was not much of a problem. Some concern is expressed at present due to the low water. The mean discharge for the river on July 4, was 30,000 second feet. Since that time the river has been steadily drowning.

Station work performed during the last two weeks has consisted of cultivating cotton, planting corn and grain sorghums on the rotations, harvesting alfalfa seed increase plots, cultivating Indian Corn, general hoeing and irrigation. Alfalfa seed harvest commenced last week.

Mr. A. J. Shamblin in charge of the Government Date Garden at Indio, California, was a station visitor on July 2. Messrs. McKeever, of the cotton office and Mr. Harrison of the office of Alkali and Drought Resistant Plant Investigations were station visitors on July 7 and 8.

E. G. Noble.

Demonstrations on Reclamation ProjectsBelle Fourche

Practically all the agriculturist's time for the week ending July 19 was spent at the experiment farm assisting in carrying out the program of the boys and girls club camp. Hogs, dairying, corn, and poultry were the subjects discussed and demonstrated for the boys. Miss Wilder of the State Extension Department worked with the girls giving demonstrations in canning, sewing, etc. Every evening instructive and entertaining films were shown on the screen. This year a health clinic was held for the first time. The clinic was patronized not only by the boys and girls in attendance at the camp but also by many from the surrounding country.

The annual experiment farm picnic was held on Saturday with a very large attendance. President C. V. Pugsley of the State College at Brookings was the principal speaker. Besides the speaking, entertainment was furnished by trips over the farm, music, sports, and in the evening by a big barn dance.

Frank E. Miller.

Flathead

The weather has been variable during the week ending July 12, being cool and then hot, and occasionally threatening to rain, which it didn't. Wheat harvesting has been started in the Moiese. Most of the alfalfa is stacked, and fields under irrigation again. The Moiese ditch main broke out 65 feet of flume which left them without water until Saturday of this week. Not much, if any, damage resulted from the break as far as the crops are concerned.

Considerable time this week was used in connection with the Farm Tours which will be held Monday and Tuesday of the coming week. The 21 farms to be on these tours have been visited to make necessary arrangements, and considerable work has been done to advertise the tours.

Flathead

A Dairy Club meeting and a Holstein Breeders meeting were attended during the week. Part of two days were needed to complete clearing up details of the Fourth of July picnic.

One day was used in alfalfa seed certification work with Mr. Jensen of Bozeman. The fields were given their first inspection. Three fields were thus inspected.

Weather was unusually cool during the week ending July 19, the nights being quite chilly, and not at all agreeable to corn growth. A considerable number of ranchers are busy with their wheat harvest. Crops this year are encouraging and will probably exceed those enjoyed in the valley for the last five years.

Two days of this week, Monday and Tuesday, were given over to farms tours of the project. Twenty one farms were visited in these two days on a route of 100 miles. One day was spent in the north end of the valley and the other in the southern part. Detailed press account included in report to Mr. Cooley. Among the visits were included calls at the farms having the leading cow and leading herds of the Cow Testing Association, and of the several breeds represented in it. This association has the cow with highest butterfat production in one month in the state, and this cow was also given attention. Two specialists from the Montana Extension service handled dairy and livestock, and Professor Harrington from Bozeman discussed landscaping and orchard problems.

One of the Flathead Project farmers has developed a 24 foot land leveler operated by four horses at each end. This is the best land leveler so far invented as reported by those well informed along this line. Mr. Sam Olson, the inventor, has applied for a patent to prevent others from doing so and reaping financial reward. Mr. Olson is glad to give his idea and plans to those who are interested. He also has put into operation a system of flume and corrugation irrigation requiring a minimum of attention. These flumes are 12 by 14 inches, made of center sawed yellow pine blanks $1\frac{1}{2}$ inches thick. Every three feet he has metal tubes about six inches long through which the water is discharged. His flume is in 30 rod sections which are operated as units, the water discharging its entire length until the area supplied by it is irrigated. He then moves the wooden dam to the end of the next unit.

It was necessary to assist the Secretary-Treasurer of the Cow Testing Association in getting his financial record to date, and to make an effort to get accounts paid to date. As the Secretary-Treasurer is resigning, he having sold his herd, the agriculturist is taking charge of this until matters are straightened out and a new man elected to this position.

One day was spent attending the dedication of Hubbert Dam, on the Camas Division, and participating in the program. Assistant Secretary of the Interior, Mr. Goodwin, was the chief speaker of the occasion. About 200 folks were out to this picnic.

An irrigated pasture mixture exhibit was prepared for office display. Mrs. Miller addressed the Moiese women on the Child welfare and County Nurse proposition. There seems to be a fair indication that the matter of securing a county nurse will be acted upon favorably at the polls this fall.

Butterfat and eggs remain as last week.

L. B. Miller.

North Platte

During the week ending July 19 a trip was made to Fort Collins to attend the annual "Farmer's Week" at the Colorado Agricultural College. The program included such important meetings as the Colorado Farmers' Congress, State Farm Bureau, Colorado Rural Life Conference, State Poultry Producers Association and Mid-summer Extension Conference. The lectures and demonstrations continued throughout the week.

After returning to the experiment farm the latter part of the week, a vaccinating demonstration was given near Scottsbluff and 150 pigs were immunized. No cholera outbreak has been reported so far this summer.

D. F. Pronns.

Shoshone

A large number of farmers finished putting up their first cutting of hay during the week ending July 19. The second cutting was 8 to 10 inches high before the first cutting was stacked in some fields. Where the first cutting was made early, the second will soon be ready.

The Farm Bureau and the commercial clubs of the country are talking of making an exhibit at the State Fair and the Midland Empire Fair. A meeting of the committee from the Farm Bureau was held in this office Monday afternoon to plan the exhibit and apportion the work among the cooperators.

A meeting of the community club of Garland was held Monday evening to discuss feeding sheep this winter. E. E. Newton of Cody and Fred Freis of Powell, both farmers who had had considerable experience with sheep, were the principal speakers. Both were conservative in their statements and there was no attempt to boom the sheep business but rather to give the farmers who had not had experience with sheep an idea of some of the difficulties that they would be likely to encounter if they went into it.

O. J. Grace.

Uncompahgre

The first half of the week ending July 12 was given almost entirely to the program held at the Montrose on Wednesday. The forenoon was taken up with games followed by a picnic dinner. The Farm Bureau furnishing free coffee and lemonade. In the afternoon three exchanges of purebred animals for scrubs were made. B. W. Fairbanks, State Livestock Specialist, demonstrating with the animals to be exchanged showed the superiority of the purebreds. A Guernsey bull calf of good breeding and individuality was traded for a grade bull of Guernsey color but carrying no Guernsey blood, his sire being a Jersey-Shorthorn and his dam a grade Holstein. A good Hampshire ram lamb was traded for a long-tailed three-year-old ram of doubtful ancestry. A Duroc-Jersey boar, the sire and other near relations of which have been prize winners of the State Fair and Western National Stock Show, was traded for a 14 month old scrub of non-descript type. Talks were made in favor of a definite better-sires campaign and an Iowa auctioneer who handled several consignments of Colorado feeder cattle last year explained his plan of selling such cattle direct to the feeders. Attendance at the meeting was not as large as had been hoped but the event was considered quite successful.

W E E K L Y R E P O R T S

Of the Offices of

WESTERN IRRIGATION AGRICULTURE

And

DEMONSTRATIONS ON RECLAMATION PROJECTS

Vol. XXV

July 26, 1924.

4 "

Newlands

Western Irrigation Agriculture

The meteorological data recorded at this station for the period July 14 to July 21 follows:

Mean maximum 89.1, maximum 93 on the 14th; mean minimum 49.4, minimum 46 on the 14th and 15th. There was no precipitation.

The work at the station has been mostly cultivation of the various crops.

The barley on F5 and F9 and the wheat on F6, F11, D1, D5, E1, E2, E7 and E8 has been cut and stacked.

The investigation of the various committees connected with Spanish Springs continues. Mr. Headley has had much of his time taken up by their work.

The meteorological data recorded at this station for the period July 21 to July 28 follows:

Mean maximum 95.6, maximum 99 on the 26th; mean minimum 52.1, minimum 42 on the 21st. There was no rainfall.

The work at the station has consisted of cultivation of crops, plowing, and cutting grain. All plats with the exception of 1, 2, 3, 4, 5, 13, 14, 15, 16, 17, 18, and 19 on H have been plowed and harrowed. These plats were planted last spring to grain, but the stand was so poor and there were so many weeds that it was considered best to plow it all under. The grain on D1, 5, E1, 2, 7, 8 and F5, 6, 9, and 11 has been cut and shocked.

There has been one irrigation given. The plats irrigated were all of C, D1, 4, 5, 8, E3, 4, 5, 6, F4, 6, 11, and 16, and H16, 17, 18, 19.

The time of one man has been taken at the High School grounds cultivating corn and hoeing the weeds along the fences and the ditches.

E. W. Knight.

Yuma

The maximum temperature for the week period ending July 19 was 106; the minimum temperature was 59; the greatest daily range 47; and precipitation 0.

Cooler days and much cooler nights during the past ten days have been quite a relief. The weather has not only been more comfortable but has also been very beneficial to the growing cotton. This cooler weather has caused less shedding of squares and small bolls. Most of the cotton now is setting on in good shape.

Yuma (continued)

Alfalfa seed harvest from the project is well under way. Reported yields so far are only fair, ranging from two to four hundred pounds. The first reported sales of the season are around $17\frac{1}{2}$ ¢. It is also reported that the alfalfa seed association has sold for future delivery several car loads of seeds to eastern dealers at the price in excess of $17\frac{1}{2}$ ¢.

The flow of the Colorado River at Yuma continues to drop. The last week the mean discharge as recorded by the Reclamation Service was seventeen thousand second feet.

Station work performed during the week consists of harvesting alfalfa seed, increasing plats, and nursery; fencing part of deciduous orchard; cultivating cotton, corn and grain sorghums; hoeing cultivated crops, roadways and ditch banks; general irrigation and repair of irrigation system.

The maximum temperature for the week ending July 26 was 108; the minimum temperature 58; the greatest daily range 45, and precipitation 0.

The period of hot days and warm nights with high humidity has continued during the past week. Thunder showers have occurred in the mountains and high mesas surrounding the valley but no precipitation has fallen locally. This uncertain weather has caused much worry among the alfalfa seed growers.

Threshing alfalfa seed continues at a rapid pace with practically all the seed cut awaiting the machines. The recleaning establishments are running over time to handle the seed as it comes in.

Station work performed during the last week consists of thinning and cultivating grain sorghums on the rotations and variety tests; cultivating Indian corn, threshing sweet clover; hauling and spreading straw; general irrigating and hoeing.

Dr. A. J. Pieters of the Office of Forage Crops Investigations was a station visitor on July 22.

E. G. Noble.

Demonstrations on Reclamation Projects

Minidoka

Mr. E. F. Rinehart, former agriculturist, and at present Extension Field Animal Husbandman for the State of Idaho, spent two days of the week ending July 19 with the agriculturist and farmers visiting some ton litter prospects and some flocks of project sheep. Several of the ton litter prospects at present look like winners and this movement has stimulated considerable interest in economical wool production.

On Saturday the project was much interested in the visit of Dr. Mead, a Director of Reclamation Service. His party visited Burley in mid-day and Rupert in the latter part of the afternoon. The directors seemed favorably impressed with the ultimate success of Minidoka Project.

Egg prices have advanced to twenty-three cents per dozen and butterfat has taken a slight drop from thirty-eight to thirty-five cents. Very little alfalfa hay is being sold; only a wagon load here and there. The sugar beet crop is considerably damaged by white fly.

Minidoka (continued)

The largest share of the agriculturist's time during the week ending July 26 was devoted to farm visits on dairy matters, particularly matters pertaining to cow testing and cream pool work. There is a strong sentiment for the organization of a cream pool officered and controlled by the farmers, reserving to themselves the right to sell the pooled cream whenever they can do best. The low prices for cream for April and the following months have been quite discouraging and these low prices have driven farmers to take some action to secure more money.

The health of livestock on the project is excellent. No contagious diseases have been reported this month so far. Veterinarians expect an outbreak of catarrhal sore mouth among cattle in August. It has prevailed at this season for about twelve years. Last year it was quite serious. A great many farmers believed the outbreak last to be a result of the tuberculin test.

A disposition to retain the better dairy cows in the herd becomes more manifest in spite of predicted higher prices for hay.

J. T. Montgomery.

Newlands

During the week ending July 12 sometime was spent in assisting the investigating committee for the Spanish Spring unit of the project, and in assembling data on the farming program and financial needs of the settlers for the first five year period of development.

Some time is now being spent in connection with the sale of alfalfa hay to dairymen and beef men from the surrounding country, who are coming to the Newlands Project for feed. Several sales of hay have already been made at prices ranging from \$12 to \$14 per ton in the stack, with feeding accommodations provided also.

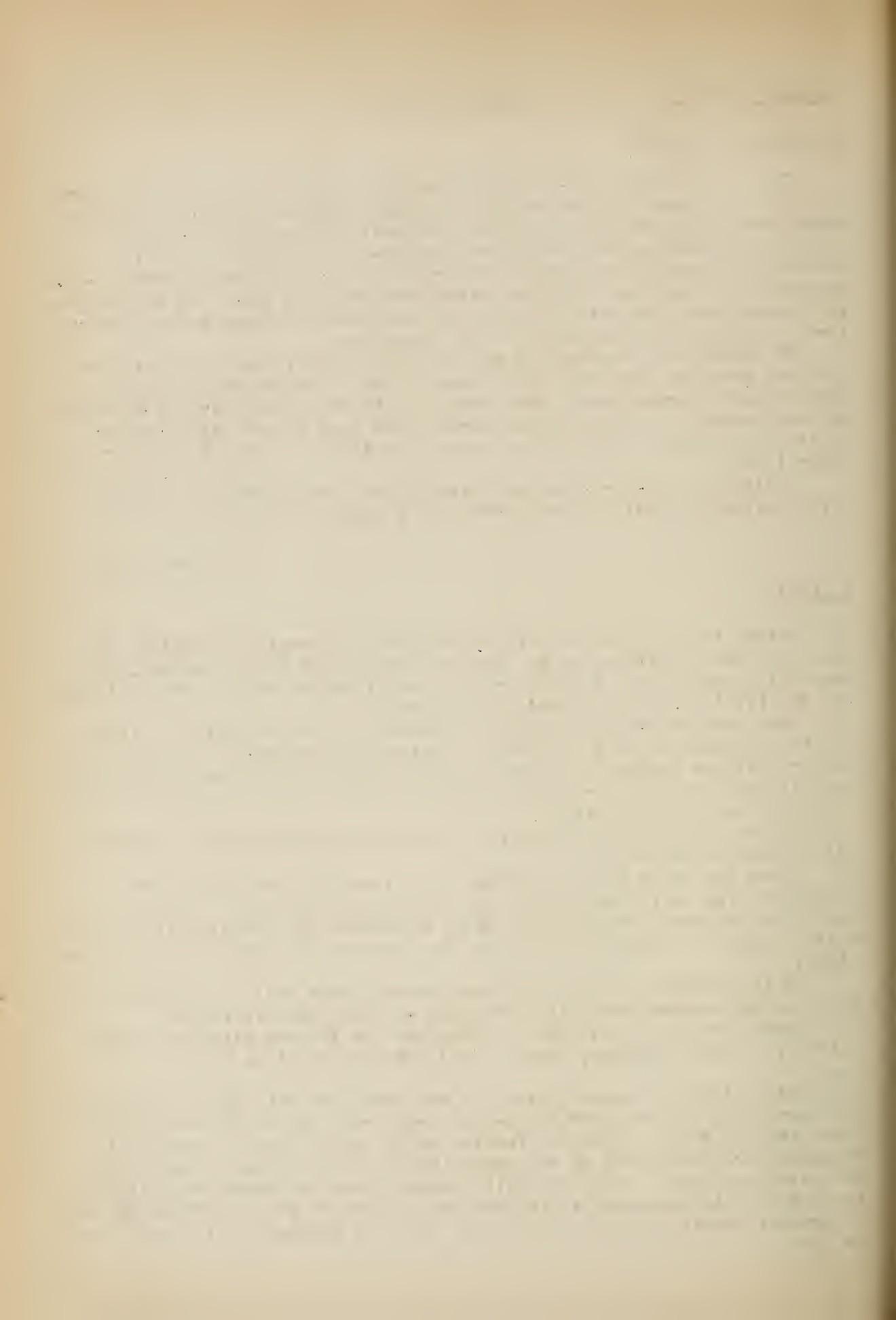
It is expected that a number of the stock men coming here in the fall will remain permanently.

Since the embargo on California cream cans has been lifted, the California creameries are coming into this field for cream. One concern has placed a Nevada man in their plant to oversee the sterilization of the cans in order that the firm may have the privilege of buying cream in this state.

It is expected that ten different cream buyers will be competing for cream in the project when all quarantine restrictions are removed.

During the week assistance was rendered in the selection of a \$350 bull for a local dairymen, from a local purebred Holstein herd.

During the week ending July 19 a trip was made into Mason Valley for the purpose of looking over two dairy herds owned by men who wanted to bring them to this project for feeding on the share basis. Some local ranchers were interested in the proposition, so in company of one of them the trip was made. After carefully looking over the proposition it was thought best to recommend a straight sale of hay to these dairymen in view of present condition of the herds, due to short feeding for the past month or more.



Newlands (continued)

Several similar propositions are expected and this trip was thought advisable for the purpose of settling on a plan for accomodating these herds.

The first shipment of cream to California was made on the eighteenth of this month, to the Northern California Milk Producers' Association at Sacramento, California. The price paid for butterfat was forty-three cents at Fallon.

Some time was spent during the week with sterility cases in dairy cows. Sufficient success is secured in these cases to justify the time spent and besides there is much educational work in this connection that the dairyman should have if he is to handle his herd intelligently.

L. E. Cline

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W E E K L Y R E P O R T S
Of the Offices of
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And
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Vol XXV

August 2, 1924.

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Western Irrigation Agriculture

Newlands

The meteorological data recorded at this station for the period July 28 to August 4 follows:

Mean maximum 90.7, maximum 94 on July 28; mean minimum 46.0, minimum 43 on August 2. There was no rainfall.

The work at the station has consisted of cultivation of such field crops as corn and beets, hoeing weeds at the high school demonstration plats, and the commencement of second crop haying.

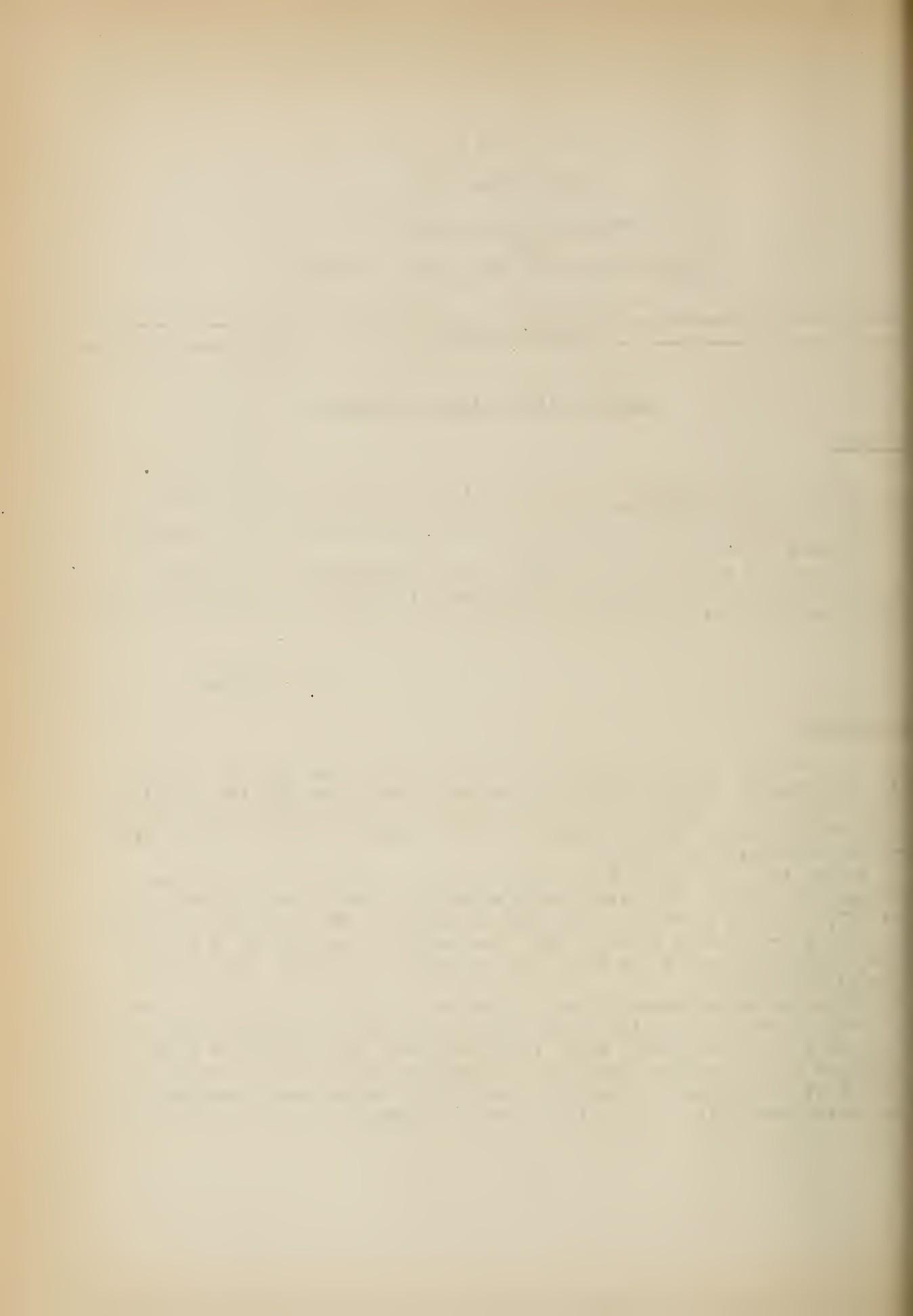
E. W. Knight

Scottsbluff

The average maximum temperature for the week ending July 26 was 87 with a maximum of 95 on the 20th; the average minimum was 52 with a minimum of 46 on the 25th. There were local showers at various points on the project on the 23rd--some communities getting plenty of rain. At the farm the precipitation amounted to .36 inch.

During the week, grain harvesting commenced. All of the short oats rotations in Field K, the winter wheat plat (rotation 5) and the barley in plats IV, V and VI in Field C were cut and shocked. The yield of grain over the project promises to be very good. Threshing of dry land wheat is now under way and some of it has been sold, the price to growers being around \$1.03 at the elevators.

Water was run continuously throughout the week and all the rowed crops, the barley in Field C and the sweet clover and alfalfa in Field K were irrigated, this being the second irrigation for beets. Many fields of beets throughout the Valley have not been irrigated at all and in such fields many of the beets are dying. At the farm, some of the plats show a poor stand owing to the freeze in May, but the growth they have made is very satisfactory.



Scottsbluff (continued)

The average maximum temperature for the week ending August 2 was 93 with a maximum of 99 on August 2. This is the hottest temperature recorded at the farm this year. The average minimum was 60 with a minimum of 55 on the 29th of July. No rainfall for the week.

The balance of the grain plots in Field K were harvested. All rowed crops were cultivated and some miscellaneous work done in preparation for the picnic to be held on the 7th. Water was run continuously throughout the week.

Mr. Scofield spent Friday and Saturday on the project.

James A. Holden.

Demonstrations on Reclamation Projects.Belle Fourche

For the week ending July 26 considerable interest was shown in obtaining money from the Agricultural Credit Association to purchase livestock at a low rate of interest. This association will give impetus to the balanced agricultural movement. Two applications for loans have been sent in.

Three hundred lambs were treated for worms by using the copper sulphate solution and the prevention of grubs in the head was also demonstrated by the pine tar treatment. The double treatment for cholera immunization was demonstrated at one farm. Milk samples from four dairies were gathered, the milk weighed and tested. Milk sheets on which records of production are kept were left at two farms. One article on feeder pigs and feeder lambs was written for publication. Plans have been made to hold three livestock tours early in August.

Two days of the week ending August 2 were spent in Hot Springs on leave attending the state convention of the American Legion.

Parts of two days were used in livestock work with county agent, Ellison. The hopper poison bran mash was used for the first time this season on several farms in the Vale territory. One worming demonstration for pigs was conducted and the worm treatment for lambs given to two farmers.

Arrangements have been made to secure active participation of the various clubs in the county fair program. A milk testing contest and a dairy judging contest are assured besides a demonstration between two girls clubs.

Three club meetings were held during the week. Mr. C. S. Scofield made a short visit to the experiment farm and the project during the week.

Frank E. Miller

Flathead

Harvesting of winter wheat continues during the week ending July 26, some of it being stacked already. Most of the irrigation for second crop of alfalfa is completed. The weather remains dry, the week ending with two intensely warm days.

Considerable attention was given the Co^m Testing Association this week determining and recording the financial status of each member and getting out notices to all regarding their dues. A permanent financial record of each member was completed to date. Personal calls were made on a number of the members with large amounts in arrears and in most cases the dues were paid at once, the others promising to do so at the earliest opportunity. The agriculturist found it necessary to take over this matter supposed to have been handled by the Secretary-Treasurer of the Association as the finances and records were so completely neglected that the continuance of the Association was endangered. Particularly in view of the coming of a new tester the first of August, it was considered essential that the financial conditions be squared up by that time (before the bills got so big that the members would feel them to be too large a burden). Things are in a much improved condition with all bills paid up to date and checks coming in every day in payment of dues.

The window display on Irrigated Pastures and the press articles and talks at meetings is resulting in considerable interest in irrigated pastures. Arrangements are under way to order seed through this office. A number of office calls regarding irrigated pastures have been entertained during the week.

Three meetings stressing the Fair and Irrigated Pastures, with an attendance of 113 were attended.

Considerable hay will be for sale, some of being old hay from one or more years ago. Two hay sheds are being built on the project, one at D'Aste and one at Charlo, to handle this surplus. The Missoula Mercantile Co. is building the warehouses. A conference was held in the office with several business men of the town with the view to interest the same company in placing a hay shed at this place (Ronan). This matter is to receive further attention.

Due to the building, in which the Agriculturist's office is located, being rented for a garage, some time was used in looking up other locations suitable for the office. It was finally possible, however, to make arrangements with the man renting the building to retain the office space as formerly. This was most pleasing, as the location and quarters are by far the best available.

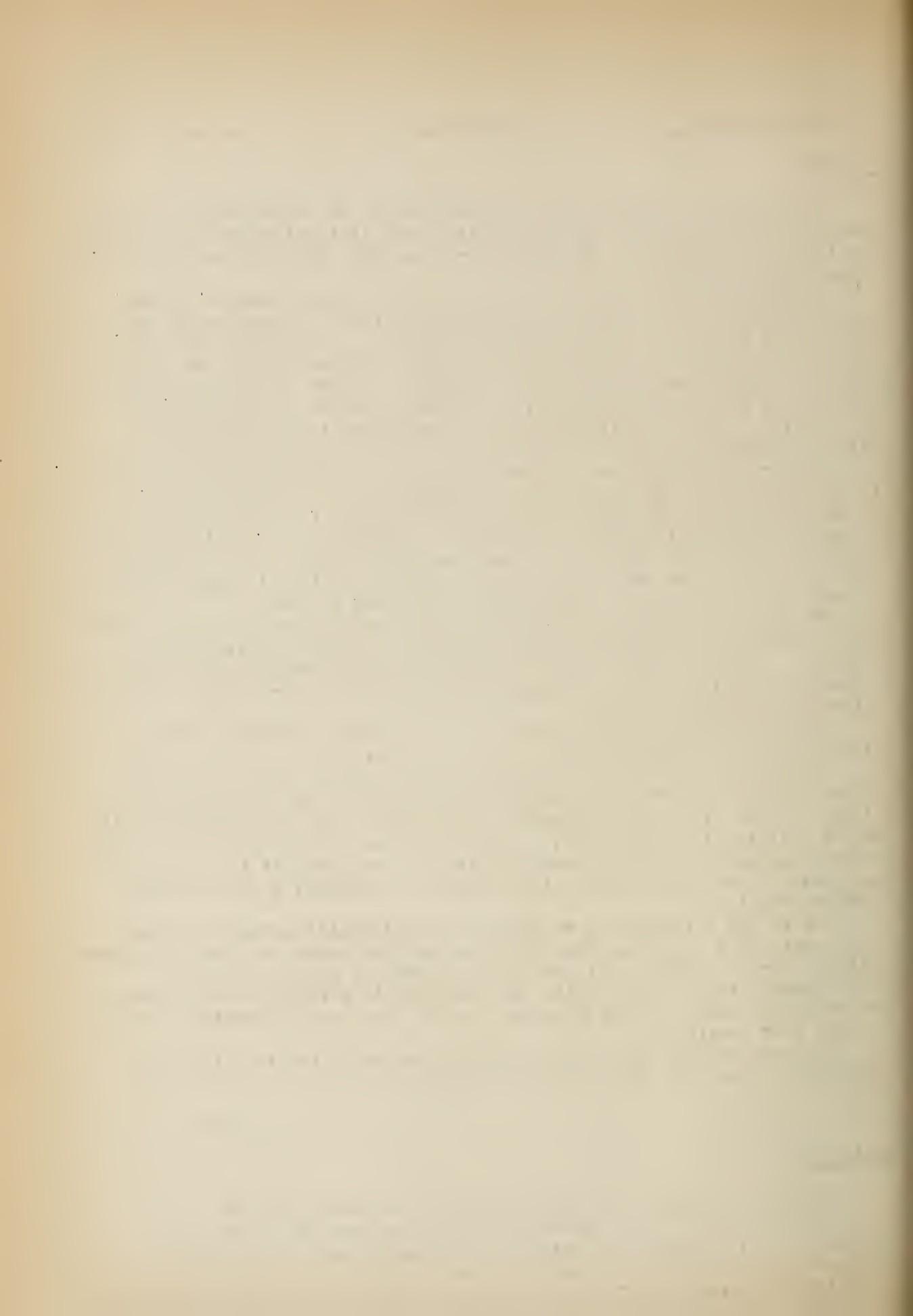
Eggs are bringing 25¢ at the stores. Butterfat remains at 34¢ and 36¢, having been that price for the last month.

L. B. Miller.

Newlands

Mr. Cline reports as follows for the week ending July 26:

The activity of range stockmen and dairymen from the surrounding country, who are looking for alfalfa hay is on the increase. One herd of thirty-five dairy cows and ten heifers was shipped in from a neighboring valley for feeding. The price for hay in this deal was \$12 per ton.



Newlands (continued)

in the stack with accomodations for the dairy herd provided. A deal was also made with another dairymen for the accomodation of a herd of forty dairy cows and the accompanying young stock on another alfalfa ranch. The price of hay in this deal was \$13.50 in the stack. The owner of the ranch will be obliged to build some temporary accomodations for this dairy herd. Several other dairymen and range live stockmen have been in the project looking for feed. A great many of the farmers are holding their hay for \$15 a ton in the stack.

The stockmen have refused so far to pay this price, and consequently many of these prospective purchasers have returned home without making the deal. It is expected that the local prices will become more established after a few deals have been made and then bargaining will be made easier. It is expected that there will be a large permanent addition to the dairy cattle population of this valley by the importation of cattle for feeding purposes this winter. Some new leases have already been arranged.

L. E. Cline.

North Platte

The week ending July 26 was devoted largely to completing arrangements for club work at the Experiment Farm picnic August 7 and at the County Fair September 17-19. Exhibits and demonstrations will be handled in cooperation with the Home Demonstration Agent in Scottsbluff county. Two specialists from the Extension Service will be at the picnic to assist with the livestock clubs.

At the request of Mr. Whitehead, secretary of the County Fair Board, a classification of club exhibits was prepared and submitted to him to be included in the premium list.

An article of 300 words in regard to the importance of culling flocks was written for local papers.

During the week ending August 2 three pig club meetings were held. Tours were made inspecting each members pig and visiting local breeders' herds. The pigs are all looking exceptionally well this year and prospects are good for a very fine exhibit at the County Fair in September.

Some time was spent with the livestock at the Experiment Farm getting everything ready for the picnic on the 7th. Club work will be featured and judging and demonstration given a prominent place on the program.

Mr. Scofield visited the project the latter part of the week going from here to Newell, S. D.

D. F. Proops.

Shoshone

The greater part of the week ending July 26 has been spent in arranging a cooperative shipment of lambs and ewes. Three cars, two of lambs and one of ewes, will be shipped Tuesday. This will be the first shipment of this class of stuff from the project and we are anxious to know what condition they will be in when they arrive in Omaha. It will take five or six days to get them to market.

A few farmers are still stacking the first cutting of alfalfa. The alfalfa mill will start grinding the first of August if they can get hay. They are offering \$11.00 a ton for hay loose, or \$13.00 baled. Everybody is irrigating and for a few days the demand for water was so great that the ditches could not carry all the water needed.

Tuesday I visited the potato and corn club members with the club leader, Professor Erwin. Corn and potatoes are both late but are growing rapidly. Corn is tasselling and potatoes are in bloom.

O. J. Grace.

Uncompahgre

The first half of the week ending July 26 as well as all of the week preceding was spent on leave. On a drive of 1,400 miles much of which was through cattle range, one of the most impressive things observed was the shortage of cattle and the length of grass. Throughout the ranges of Wyoming and northern Colorado grass stood "knee high" and in seed while probably less than 200 head of cattle were seen on the entire trip.

Thursday was club day. The livestock clubs being taken on a judging trip. The Guernsey herd of R. W. Romig and the Holstein herd of Loesch Brothers were visited and some good practice secured.

Saturday was spent in Delta arranging for meetings of club members and the local poultry association for next week.

At a meeting in Ft. Collins last week of representatives of local poultry associations a state federation of such organizations was formed, the undersigned being elected one of the state officers.

Market quotations for end of the week are as follows:

Alfalfa \$6.00 to \$8.00 a ton

Eggs, 28¢ dozen

Barley, \$1.75 cwt.

Turkeys, no market

Corn, \$2.25 "

Beef cattle, top Denver \$0;50

Oats, \$1.85 "

Pigs, top Denver, \$9.50

Wheat, \$1.85 "

Sheep, top Denver \$12.25

Potatoes, new, \$1.25

Chickens, hens, 11¢ to 14¢

springs 20¢

E. A. Ireland,

W E E K L Y R E P O R T S

Of the Offices of

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Vol. XXV

August 9, 1924.

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Western Irrigation AgricultureNewlands

The meteorological data recorded at this station for the week ending August 9 follows:

Mean maximum 90.3, maximum 92 on the 4th, 5th, and 7th; mean minimum 48.1, minimum 43 on the 8th and 9th. No rainfall was recorded.

The work at the station has consisted of cultivation of crops, stacking hay, threshing grain, and irrigating. The plats irrigated were all of Fields C and D; all of F except plats 4, 5, 9, and 16; all of G; H 1, 2, 3, 4, 5, 13, 14, 15, 16; and B 5, 6, and 11 to 22 inclusive.

The following table gives the grain yields for 1924 at the Newlands Experiment Farm.

GRAIN YIELDS 1924.

Plat No.	Area	Crop	Yield Straw and Grain		Yield per acre	Yield of Grain and Straw	
			acres	lbs.		lbs.	lbs.
D 1	.26	Wheat		440	141	542	1,150
D 5	.56	"		650	225	402	759
E 1	.56	"		1,305	519	927	1,404
E 2	.57	"		800	331	581	823
E 7	.49	"		140	38	78	208
E 8	.72	"		1,120	299	415	1,140
F 6	.25	"		340	120	480	880
F 11	.25	"		275	108	432	668
F 5	.25	Barley		285	95	380	760
F 9	.25	"		230	53	212	708

E. W. Knight

San Antonio

The only rainfall recorded at the San Antonio Experiment Farm during the six weeks ending August 2 occurred on the first day of the period. On June 22 there was recorded a precipitation of .52 inch. This was the end of a three-day rain which totaled 4.55 inches. Thirty-nine days were clear, two days were partly cloudy, and only one day cloudy. Notwithstanding the long rainless and cloudless period, temperatures have not been excessive, and with a gentle breeze blowing most of the time the weather has been generally quite comfortable. The meteorological data recorded at the farm is summarized by weeks in the following table:-

Week ending	Temperatures			Precipitation	Sky		
	Max.	Min.	G.D.R.		Clear	Partly Cloudy	Cloudy
June 28	92	70	21	.52 June 22 T. June 23	6	...	1
July 5	95	61	25	None	6	1	
July 12	96	64	25	None	7	...	...
July 19	98	75	23	None	7	...	...
July 26	103	68	31	None	6	1	...
August 2	100	71	27	None	7	...	...

Sufficient moisture was available during the growing season of corn for normal development, and indications are that a record yield of that crop will be harvested.

Cotton, especially on the lighter soils, is beginning to show signs of distress for lack of moisture. In spite of the long period of clear, dry days a heavy infestation of boll weevils continues and very few cotton bolls are developing. A large percentage of the comparatively small number of bolls which have been produced are being punctured, as many as 8 larva being found in practically full grown bolls.

The "cotton-flea," which was reported to have done serious damage in certain localities last season, has been active on the Experiment Farm this year. The insect which receives credit for this damage has been identified by the Bureau of Entomology as Psallus seriatus. The damage consists of an injury to the squares when they are in the minute bud stage, causing them to shed when only an eighth of an inch or less in diameter. The damage occurs in localized areas rather than generally throughout the region.

The dry weather of the period has made possible the saving in excellent condition of a heavy hay crop produced by the abundant moisture of the early part of the season. The crop consists principally of Johnson grass, Sumac sorghum constituting most of the remainder.

All grain sorghums on the Experiment Farm were harvested. Fairly good yields of milo were produced, but bird damage was exceptionally severe. Large flocks of sparrows infested the fields from the time the grain was in the milk stage and were chiefly responsible for the damage. These birds are extremely difficult to drive from the fields. Considerable numbers of rice birds, blackbirds, jack daws, and doves appeared but were more easily kept out of the grain. Early planted plats of early maturing varieties escaped serious injury from the sorghum midge, but late planted plats and long season varieties were quite heavily infested. None of the plats have yet been threshed.

San Antonio (continued)

The two latest flax plantings were harvested, and the "flax variety" and "time of seeding flax" plantings were threshed during the period. Although plantings in the nursery rows and variety test suffered severe winter killing, and some losses were caused by wilt, heat canker, and a new disease known as Pasmo, the yields were fairly satisfactory, ranging from a minimum of 10.2 bushels to a maximum of 19.2 bushels per acre in the variety test. In the time-of-seeding test the maximum yields (18.0 and 18.9 bushels per acre) were produced on plots seeded December 29, 1923 and January 26, 1924, respectively. The nursery planting consisted of duplicated single row plots, the rows being 264 feet long and spaced 16 inches apart. The maximum average yield in this planting was at the rate of 24.7 bushels per acre by the variety La Flata (C.I. 44).

Work at the station has included cultivations of all cotton, sorghums, orchards, and fallow fields; harvest of hay crops, grain sorghums, broomcorn, and flax; weeding of fields, roads, and fence lines; threshing flax; determinations of soil moisture; shooting birds from grain sorghums; plowing of small-grain stubble fields; manuring orchard B-3; and miscellaneous repairs to buildings and equipment.

Mr. R. D. Martin left for Greenville, Texas, June 27.

Mr. D. R. Hooton, whose transfer from the Office of Western Irrigation Agriculture to the Office of Crop Acclimatization and Adaptation Investigations was effective July 1, left for San Diego, California, July 10.

Geo. T. Ratliffe.

Yuma

The maximum temperature for the week ending August 2 was 111°; minimum temperature, 61°; greatest daily range 49°; precipitation, 0.

The month of July passed with only a trace of precipitation recorded. This is unusual for this season as rains are normally recorded during this month. This lack of rainfall, however, has been a great help to the alfalfa seed harvest. Threshing continues on the project and normal yields are reported. It seems that the best and most consistent yields have been secured this year on lands that were given late irrigations. The old established practice had been to irrigate the last time in March and depend upon the high water table in certain sections to carry the alfalfa through a seed crop. A very low river this year with a drop in the water table has made it necessary to irrigate later to insure a seed crop. The shedding of squares and young bolls of cotton still occurs.

An occasional period of one or two cool nights has helped the shedding condition.

The discharge of the Colorado River at Yuma during the week reached the low state of 7,800 second feet.

Station work performed during the week consisted of cultivating corn and grain sorghum; mowing alfalfa on the variety tests C-39-41 inclusive; diskng fallow flats; re-cleaning clover and alfalfa seed; trimming roadway plantings; general irrigating and hoeing.

Professor W. E. Bryan, of the University of Arizona, and Mr. L. C. Beatty, of the Yuma Date Garden, were station visitors on July 31.

The following meteorological data were recorded for the week ending August 9:

Yuma (continued)

Maximum temperature, 108°; minimum temperature, 63°; greatest daily range, 45°; precipitation, 0.

Weather conditions continue favorable for both alfalfa seed harvesting and for the growing cotton. The first bale of cotton of the season was ginned during the week. Alfalfa seed prices range around 17 to 18¢ per pound. Threshing prices are reported to be around 2½¢ per pound. A number of carloads of alfalfa straw was contracted for the last few weeks at \$13.00 per ton, f.o.b. Yuma.

Station work performed during the week consisted of harvesting alfalfa on the irrigated rotations, cultivating grain sorghums on the rotations, cultivating and hoeing Indian corn, cutting grass in irrigating ditches, general irrigation and hoeing.

Mr. C. G. Marshall, in charge of the Government station at Chula Vista, California, was a station visitor here on August 8.

Edward G. Noble.

Demonstrations on Reclamation Projects.Belle Fourche

Mr. G. Heebink, assistant livestock specialist of the State College, arrived on the project Thursday afternoon of the week ending August 9. On the following day a dairy club tour was made to St. Onge where members of the St. Onge Holstein Club were met and their farms visited. Judging demonstration work and contests were held at two farms. Nineteen club members and four adults from the project made this trip. Thanks are due Mr. Aune for the use of the experiment farm truck.

On Saturday afternoon the dairy judging team made a trip west of Belle Fourche to the farm of Mr. Wendelkin, where his fine herd of Guernseys were judged and his practical dairy lay-out and equipment noticed. The members of the dairy club have been feeding a light grain ration to their animals for the past month, and this feeding with grooming and handling has made a big improvement in the animals. Competition for prizes at the county fair is keen as is also places on the judging team. The judging team has a contest at the Butte County Fair with the Lawrence County team, and then will go to the State Fair the following week.

Milk samples were gathered at two farms and butterfat tests run. The monthly testing and weighing of the milk is now showing up the superiority and inferiority of many animals, with the result that interest is increasing in the good dairy animal and the use of the purebred sire.

Butterfat is worth 32¢ at the cream stations. Number two eggs bring 18¢, number one eggs 23¢, and ungraded eggs 20¢.

Frank E. Miller.

Flathead

Weather continued fair with only one shower during the week ending August 2. The first of the week was warm but the latter half cool. Grain is dry and in fine condition for heading and threshing. A few will start cutting the second crop of alfalfa the latter part of next week. This with the grain harvest will demand considerable labor which this year, fortunately, is reasonable, wages being from \$2.50 to \$3.00 a day with room and board.

Flathead (continued)

Most of the fore part of the week was used in various phases of work connected with the coming Lake County Fair, particularly in preparing the premium list for general and for club work. Meetings were held with the program (premium) committee and with the secretary of the Fair to set this matter in form for the printer. The printer's copy of all but a few pages of material to be furnished by the secretary was given the printer on Thursday.

The greater part of two days was consumed in work connected with the Cow Testing Association. Mr. J. C. Paisley, of Iowa, reported on Friday to relieve the temporary tester. The work was discussed and transportation (horse and buggy) located, and on Saturday a meeting of considerable length with retiring and new tester was necessary to keep the work going on uninterruptedly.

A Calf Club meeting with 16 present was attended and three calf club members visited and calves inspected.

Butterfat remains 34¢ and 36¢. Eggs are 25¢ a dozen.

L. B. Miller.

Newlands

Some time was given over during the week ending August 2 to closing up the dairy herd record work of July and summarizing the work for publication. The number of cattle tested during the month was slightly less than the usual number. For the past two months it has not been possible to carry out the testing work on schedule time because of the fact that temporary testers had to be employed. The testing work for July was cut down so that the new tester could handle the work and get everything done on schedule time. By the end of July all herds were tested and the reports completed and sent out. Some time will now be devoted to getting the membership of the association back to the one thousand cow mark where it was a year ago. This should be accomplished in another month or so. During the month of July there were 47 herds on test including 669 cows. The average production of these cows for July was 774 pounds of milk containing 28.0 pounds of butterfat. The highest herd average for herds over 15 cows was a herd containing 30 cows, which produced an average of 703 pounds of milk containing 34.4 pounds of butterfat. The highest producing small herd was 4 cows, which produced an average of 1294 pounds of milk containing 48.2 pounds of butterfat.

The second crop of alfalfa hay is just about ready for the harvest, and it is expected to be exceptionally good as was the first crop. There is an extra large number of harvest hands on the project awaiting the hay harvest to begin. There should be no shortage of labor for this crop. The wages will be \$3.00 per day and board.

The cantaloupe harvest should begin in another week. A few cantaloupes are being marketed this week from some of the earliest plantings. The prospects are exceptionally good for this year's crop, and considerable preparations are being made for the cantaloupe harvesting season.

The butterfat price for the week was 41¢ at Fallon. Hay prices have not changed. Twelve dollars per ton in the stack is being offered with few sales. Eggs are worth 32¢ at Fallon. Wheat is rapidly increasing in price. The last quotation was \$41.00 per ton.

L. E. Cline.

Shoshone

The first two days of the week ending August 2 were spent in lining up and loading three cars of sheep. The greater part of Sunday and Monday was spent in finding enough lambs to fill out a car after one farmer had withdrawn his lot of 50 head. The sheep were loaded Tuesday evening. The shipment consisted of $2\frac{1}{2}$ cars of lambs and 1 deck of old ewes. We had nearly every class of sheep represented in this shipment except very thin ewes.

The second brood of potato bugs are appearing and doing considerable damage in some fields, especially where the spraying for the first brood was not very effective. I counted 107 adults on one potato vine. A part of the field where they were the worst had not been sprayed for the first brood.

T. W. Moseley, from the Huntley Experiment Farm, spent Wednesday visiting some of the better dairy herds on the Project.

I spent the first two days of the week ending August 9 at the Huntley Experiment Farm in conference with Mr. C. S. Scofield and inspecting the work of the Experiment Farm. Thursday was spent at the County Farm Bureau picnic at Ebert's grove south of Cody.

Thursday we received the returns from the cars of lambs shipped the previous week. It took six days to get them from Powell to Omaha, but there was less than a four-pound shrink on the lambs which were weighed before loading. The fat lambs sold for \$13.00, the feeders for \$11.65, and the ewes from \$4.00 to \$7.50. The different lots averaged from 65 to 68 pounds in Omaha.

A few farmers have started on the second cutting of alfalfa. Corn is late and is just beginning to tassel.

O. J. Grace.

Uncommahgre

A very beneficial rain fell the first of the week ending August 2 and local showers fell later in the week. Water for irrigation is becoming short and the rain was appreciated, coming just before second hay harvest when it could do little damage. With the wheat crop nearly made and weather becoming cooler it is believed that the water shortage may not be serious except in isolated cases. Wheat harvest is well started and some threshing has been done. The crop looks good and the price is much better than a year ago, but the acreage is not up to normal.

The regular milk tests were run this week; nine herds were tested.

One small flock of hens was culled and a meeting of the local poultry association directors was held. This meeting was so poorly attended that another was called for next week. Two club meetings were attended, also a meeting of the local livestock association.

With the local veterinarian a trip was made through the lower part of the project to investigate cases of sore mouth in cattle. The trouble, which is also affecting horses, seems to be a stomatitis, but veterinarians do not agree as to whether it is infectious or caused by some kind of forage. Animals on pasture are affected more than those on dry feed. The same or a similar trouble occurred here some years ago and was widespread and quite serious.

Two men came to the office this week and requested to enroll in the national "Better Sires--Better Stock" campaign. The next issue of the

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Uncompahgre (continued)

Farmers Exchange Bulletin, a Farm Bureau publication, will be made a special number in the interest of this movement.

Markets: Alfalfa, \$6.00 to \$8.00 ton
Barley, \$1.75 cwt.
Corn, \$2.25 cwt.
Oats, \$1.85 cwt.
Wheat, \$1.85 cwt.
Potatoes, new, \$1.15 cwt.
Beef cattle, ton Denver, \$9.50
Hogs, ton Denver, \$11.25
Sheep, ton Denver, \$12.75
Eggs, 25¢-30¢ dozen
Hens, 11¢-15¢; springs, 25¢

The hog market made a rapid advance to the above figure during the fore part of the week, but dropped about two cents the latter part.

H. A. Ireland.

W E E K L Y R E P O R T S
Of the Offices of
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Vol. XXV

August 16, 1924.

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Western Irrigation Agriculture

Huntley

The maximum temperature for the week ending August 9 was 87 and the minimum was 41. No precipitation was recorded.

Harvest of second cutting alfalfa was begun. Weather conditions are favorable for harvest, and the yield and quality of hay are good.

Threshing of grains on dry lands adjacent to the farm is well under way. Yields of winter wheat are varying from 30 to 45 bushels per acre. This grain is selling at \$1.00 to \$1.10 per bushel locally.

The second cutting of alfalfa was made during the week.

Messrs. C. S. Scofield, O. J. Grace, F. B. Linfield, and H. L. Westover were visitors at the station during the week.

The maximum temperature for the week ending August 16 was 96 and the minimum was 42. No precipitation was recorded.

Harvest of second crop alfalfa and grains and threshing of grain is well under way on the project.

At the station, grain harvest was completed and all alfalfa and cultivated crops were irrigated.

The annual project picnic was held in the project park adjacent to the experiment station grounds. The attendance was estimated at about 2,000 people.

Director F. B. Linfield and Governor Joseph M. Dixon were the principal speakers.

Dan Hansen.

Newlands

The meteorological data recorded at this station for the week ending August 16 follows:

Mean maximum 91.3, maximum 96 on the 12th and 13th; mean minimum 48.4, minimum 40 on the 17th. There was no rainfall.

The work at the station has consisted of cultivating the corn, mowing the irrigation ditches, and some general work about the buildings and grounds.

Part of the millet on the high school demonstration plats has been cut for hay. The balance will be cut later and threshed for seed for next spring.

Last fall plats Y 14, 15, 16, 17, and 18 were planted to rye. These plats are so alkaline that in previous years it was impossible to obtain much of a stand of wheat or barley. The rye was cut and threshed. It yielded at the rate of 1,013 pounds of grain to the acre.

E. W. Knight.

San Antonio

Dry weather continued through the week ending August 9. Summer plowing is getting to be a difficult operation, the soil turning up in large "boulders" and in some instances requiring special means to keep the plow in the ground. The maximum temperature during the week was 102, minimum 72, and the greatest daily range 29. Five days were clear, two were partly cloudy, and there was not a trace of precipitation.

Conditions were excellent for corn harvest, which was started during the week, and for the eradication of weeds and Johnson grass. Good headway was made in both operations.

Cotton picking in the region served by San Antonio gins was started south of town the first of the week, and by the latter part of the week wagons hauling the crop were quite common on the road passing the Experiment Farm. Only a very small amount of cotton has opened on the station.

In addition to corn harvesting and weed eradication, as referred to above, the work in the field has included the hauling of sorgo from rotation plats planted in 4.1 ft. rows, and cutting stalks and plowing on rotation corn plats.

Mr. Homer C. McNamara, of the Crop Acclimatization Office, arrived at the station the morning of August 7 and left that night for Greenville, Texas, accompanied by Mr. A. T. Valentine of the same office.

During the week ending August 16 the following meteorological data were recorded: Temperatures - maximum 102, minimum 67, greatest daily range 32; precipitation none; sky, 7 days clear. Heavy banks of clouds were in evidence during the latter part of most nights, but they disappeared shortly after sunup and a cloudless sky usually prevailed during the remainder of the day.

The so-called "cotton flea" (*Psallus seriatus*), which has been present in serious numbers since the earliest buds were formed and whose injury to cotton consists of so damaging the minute buds as to cause them to shed when an eighth of an inch across or smaller, has practically disappeared. The cotton boll weevils continue active. Their continued activity in spite of the prolonged dry, hot weather is undoubtedly due to the large number of eggs which have been placed in half grown, or larger, bolls.

The harvesting of all corn fields and the plowing of all summer plowed, rotation corn plats were completed during the week. Other station work has included general weeding and chopping of Johnson grass, manuring rotation plats and grapes on B3, and upkeep of grounds and buildings.

Mr. R. D. Martin and Mr. A. T. Valentine, of the Crop Acclimatization Office, arrived from Greenville, Texas, August 15.

Geo. T. Ratliffe.

Scottsbluff

The average maximum temperature for the week ending August 9 was 86, with a maximum of 94 on the 4th; the average minimum was 56, with a minimum of 52 on the night of the 3rd. There was a light shower on the night of the 9th amounting to .30 inch.

The work during the week was largely devoted to getting ready for

Scottsbluff (continued)

the picnic held on the 7th. The attendance this year was larger than it has ever been. Boys' and girls' club work was emphasized this year more than usual. Specialists from the Extension department at Lincoln were present and assisted in this work. The work of the Farm is beginning to attract the attention of the farmers of the Valley, and the field inspection trips on that day brought out a good crowd.

The second crop of alfalfa was cut on Saturday. The yield will not be nearly so heavy as the first cutting.

James A. Holden.

Demonstrations on Reclamation Projects.Belle Fourche

Two days of the week ending August 16 were spent in activities directly connected with the county fair. Three livestock teams will give livestock demonstrations at the fair besides two girls' teams. The best of the boys' and girls' teams will be taken to the State Fair.

Part of one day was spent with Federal veterinarian G. W. Cronen on sheep scab work. Evidence of scab was visible in two flocks north of the project, but recent dippings have cleaned up these flocks it is hoped.

Serum and virus were delivered to two farmers in the Vale territory, aid given in hoover control through the use of poison bait, and one death due to black leg investigated and vaccination advised. One article was written for publication and three meetings attended.

Frank E. Miller.

Flathead

The weather continued dry and fairly warm during the week ending August 9. The second crop of alfalfa was put up in good condition, and it made a good yield. Threshing has started. Grain yields are fair, better than anticipated in many instances.

The new cow tester was equipped and started on his work the first of the week. Reports concerning him are very satisfactory.

Considerable time during the week was given to the Montana Mutual Dairy Loan situation, visiting the farmers who had cows purchased from the organization, learning their views of the organization, and seeing the kind of cows secured. This investigation started as the result of a letter from the "Montana Farmer", which is attempting to learn the merits and demerits of this organization with a view to publishing in its pages what those with whom the organization has been dealing think of it.

A farmstead was planned for Mr. Dillon, and irrigated pasture management and growing of seed clover and alfalfa discussed at some length with him. The farm and Holstein cattle of Dr. Rider were given special attention to assist him with the stock and management of pasture.

Ten samples of milk were tested for Mr. Hogan. One more farmer has installed a milking machine and another will get one in a short time. This will make, to my knowledge, 4 DeLavals, 3 Hinmans, 3 Clean Easy, and

Flathead (continued)

3 hand-power Page milkers in operation on the project.

The Testing Association month ended on Saturday, and a small drop in production during July was noted. The pastures are short on many farms, making it necessary to feed hay regularly. Those with well established irrigated pastures found little need for the extra hay feed.

Threshing is well under way and was progressing rapidly until it started to rain Wednesday, continuing intermittently the remainder of the week ending August 16. Much of the alfalfa (second crop) is stacked, especially in the Moiese Valley. A considerable amount was down during the rain.

Three meetings were on the calendar for the week - two fairs and one club meeting, but due to necessary car repairs was unable to attend them. The rain also made the roads in very poor condition for traveling in automobiles.

Several days were spent in various phases of Cow Testing Association work. The monthly report was prepared with the new tester and press articles on same were written. Monthly statement forms were mimeographed and July statements prepared for the members of the Association. The tester was visited in the field and furnished additional supplies, and a conference was held with the President of the Association.

Part of the time was devoted to Fair work, reading proof on the premium list, conference with Fair secretary and with Moiese Fair chairman.

Butterfat remains at 34¢ and 36¢; eggs 25¢.

L. D. Miller.

Minidoka

Practically all of the week ending August 9 has been devoted to dairy and poultry matters. The Holstein breeders of the project will make up a project herd which will be exhibited at some neighboring fairs. This work was very successful last year and promises even better this year. The prospects are very bright for an excellent herd, which we expect will assist us materially in disposing of some surplus females and a number of well-bred bull calves.

The Minidoka County Poultry Association will put on a little poultry show at Rupert August 23. The principal idea back of this show will be to demonstrate the development of next season's laying stock which has been incubated and brooded according to the program of the Poultry Department of the Idaho Agricultural College.

Sugar beets show very serious damage from the ravages of white fly. Other crops look well, particularly alfalfa. Corn is doing nicely, and beans are a good prospect. Potatoes are not expected to be a very heavy crop.

Prices of cream and milk are holding steady, and eggs have increased to twenty-three and one-half cents each.

J. T. Montgomery.

North Platte

The most important event of the week ending August 9 was the annual picnic at the Experiment Farm. More than 2,000 people were in

North Platte (continued)

attendance during the day, and a large crowd was present at the barn dance in the evening.

The program started at 9 o'clock in the morning with team demonstrations by boys' and girls' clubs followed by an hour of sports before luncheon. The afternoon was filled with exercises for men, women, and children. While the men were taking a field trip inspecting the crop and livestock, the women were busy with a better babies contest and women's club demonstrations, and the boys' and girls' clubs were having livestock judging demonstrations and contests followed by a parade of 200 club members led by the Mitchell band. Dr. Elwood Mead was present and spoke for a few minutes about the middle of the afternoon. An hour and a half of races and other sports for all occupied the time until 6 o'clock.

It was perhaps the most successful picnic ever held at the Farm, both from the standpoint of interest shown and the character of the program.

D. H. Propps.

Shoshone

The week ending August 16 has been very favorable for haying. The second cutting is being put up in good condition. About half of the farmers are stacking. A part of the second cutting is very late due to the first cutting being put up late. No third cutting will be made on many of the fields. The alfalfa mill is not grinding yet as they are only offering \$9.00 for loose hay delivered at the mill, and farmers are holding for higher prices.

A representative of the Allan Seed Company was on the project trying to interest the farmers in growing seed peas on contract. Several farmers seem to be interested.

A stock buyer picked up a car of feeder hogs this week paying 6 to $6\frac{1}{2}$ cents. The most of them are pretty thin as they have been raised on alfalfa with very little grain.

A part of the week has been spent helping to make out the premium list for the county fair. There is about \$650 of county money available, and it was necessary to trim the premium list to cover those classes where there would likely be competition.

O. J. Grace.

Uncompahgre

On Monday of the week ending August 9 the livestock clubs were taken on a stock judging trip, visiting four farms at which Jersey cattle, Poland China hogs, Hampshire sheep, and Percheron horses were judged. It has not been possible to do any work on beef cattle this year as there is no stock of this class in the valley at this season of the year.

E. D. Smith, District Extension Director, was in the office two days this week considering the program of extension specialists and a county agent for Montrose County, Mr. King having resigned to take a similar position in Mesa County (Grand Junction). A successor has not definitely been selected.

Uncompahgre (continued)

been definitely selected.

Members of pig clubs were visited and all pigs of first year members were weighed. While there are not many of these this year, the average quality is high and gains made in most cases have been satisfactory.

A meeting of the directors of the local poultry association was attended at Delta. Milk tests were run for two men. Samples of skim milk tested for one of them showed a test of .35 per cent, indicating very inefficient skimming. The herd owner had complained that the present tenant on his farm was not getting the same results from the cows that a former tenant secured.

A disease of horses and cattle, called by a local veterinarian vesicular stomatitis, is becoming widespread and serious on this project and adjacent territory. As far as effects on animals contracting the disease is concerned it appears to be little if any less serious than foot-and-mouth disease. Animals affected become emaciated because of inability to eat, and cows in milk fall off in production to practically nothing. Udders of cows are quite commonly involved, becoming so sore that they cannot be milked. In some instances loss of one or more quarters of the udder is threatened. Veterinarians are prescribing local treatment and quarantine. So far no deaths have been reported, but the spread of the malady to range cattle would be likely to result in considerable loss.

Markets.

Mr. Ireland reports for the week ending August 16 as follows:

The outbreak of stomatitis among horses and cattle continues. A report of the situation was made to the State veterinarian, who states that the disease is prevalent in practically every part of the State. Very few deaths have resulted, but losses in flesh, milk production of cows, and work of horses have been serious. Several calls have been made in connection with the disease and such information as is available has been given through press, by phone, etc.

Milk tests were made in ten herds. Skim milk was tested for a man whose new separator had been wasting considerable cream, the first test having shown .35 per cent of fat in skim milk. The second test showed only .01 per cent.

The pigs in one entry of the "ton-litter" contest were weighed. They were about $3\frac{1}{2}$ months old and weighed 982 pounds. They have not been forced at all and are in only fair condition. There are 14 pigs in the litter, three of which were raised by hand to weaning age.

A meeting of the advisory board of the County 4 H club was attended and arrangements made for a general meeting of all clubs on the last Saturday of the month.

Markets are practically the same as reported for last week. Cattle went to \$10.50, hogs to \$9.70, and sheep to \$13.00.

H. A. Ireland.

W E E K L Y R E P O R T S

Of the Offices of

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and

DEMONSTRATIONS ON RECLAMATION PROJECTS.

Vol. XXV.

August 23, 1924.

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Western Irrigation Agriculture.Newlands

The meteorological data recorded at this station for the week ending August 23 follows:

Mean maximum 84.7, maximum 95 on the 24th; mean minimum 46.0, minimum 38 on the 18th. There was no rainfall.

The work at the station has been of the general farm type, such as cultivation of crops, mowing ditch banks, and cleaning the irrigation levees of weeds. Some new fences are being built with the intention of enlarging our pasture experiments.

There has been one irrigation given during this period. The plats irrigated were C-2 to C-13 inclusive, D-8, and E-5 and 6.

E. W. Knight.

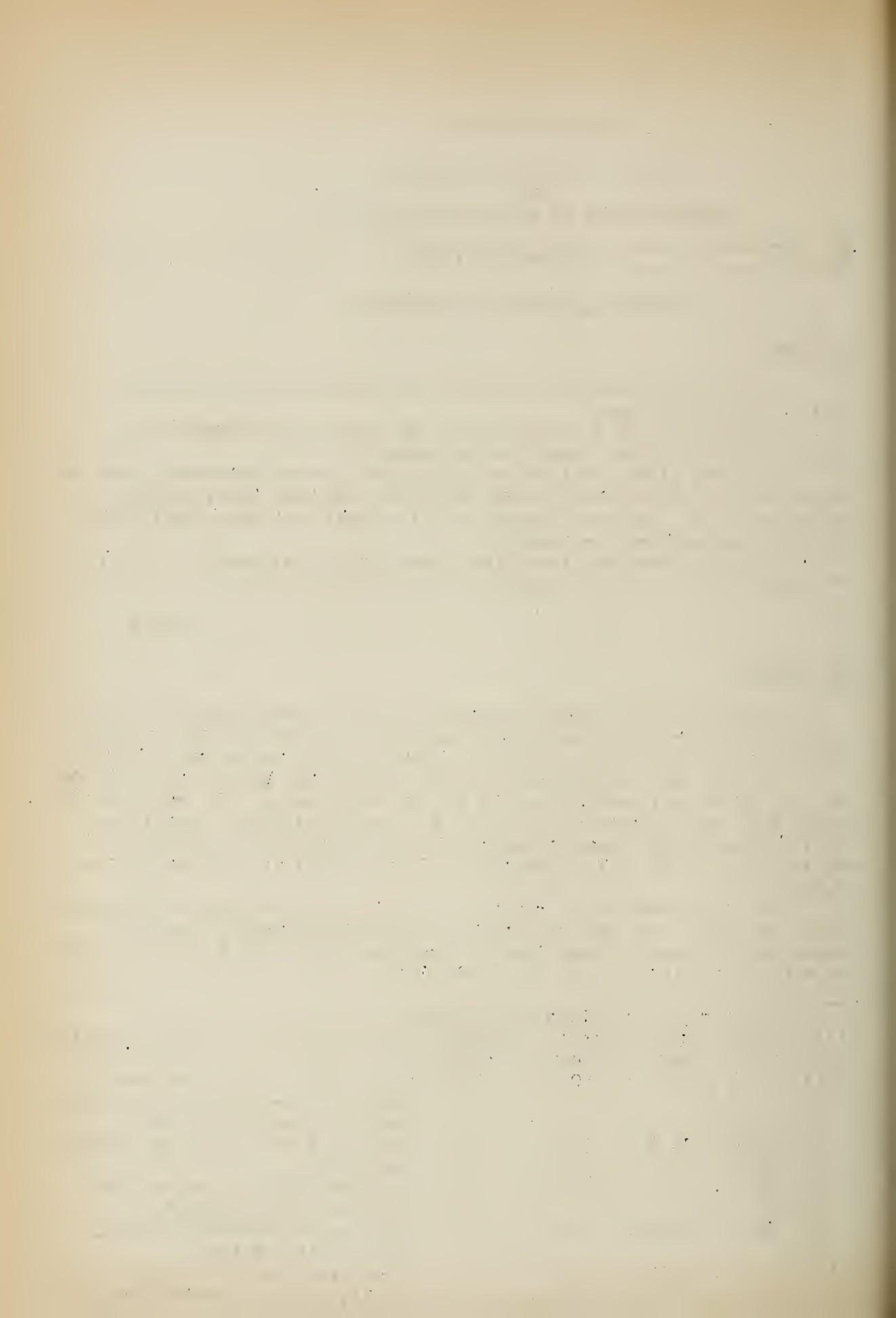
San Antonio

During the week ending August 23 a maximum temperature of 100 was recorded for four days; the minimum temperature was 71, and the greatest daily range was 29. Seven days were clear and there was no precipitation.

A short trip was made south of San Antonio the last of the week and the fact noted that practically all cotton fields showed a heavier set of cotton than the majority of fields on the experiment farm. This is undoubtedly due to the sporadic nature of the infestation by the cotton flea and the boll weevil, both of which have been present in abundance at the station.

The milo grown in the rotation and tillage experiments was threshed during the week. The following table gives yields recorded, estimated percentage of damage to crop done by birds and midge, and the crop sequence and cultural practices applied to each plat.

	:Yield per acre :	Estimated damage by:	
Plat	Grain : Stover:	Birds : Midge	:Crop sequence and tillage practice
	bushels:	tons	:per cent: per cent :
A4-13:	22.3	1.78	50 : 10 : Milo (Field peas) plow spring;
:	:	:	: sorgo (8" drill) plow Nov.; cotton,
:	:	:	: plow fall; oats plow June.
17:	25.1	1.56	30 : 5 : Do; except field peas are harvested for hay.
:	:	:	:
A5-3 :	29.4	2.26	40 : 0 : Milo, plow July; oats, plow June;
:	:	:	: cotton, plow November.
6 :	39.6	2.53	25 : 0 : Do; except barnyard manure applied after cotton.
:	:	:	:
10 :	29.1	2.16	35 : 5 : Milo, plow July; cotton, plow fall;
:	:	:	: oats, plow June; cotton, plow Nov.



San Antonio (continued)

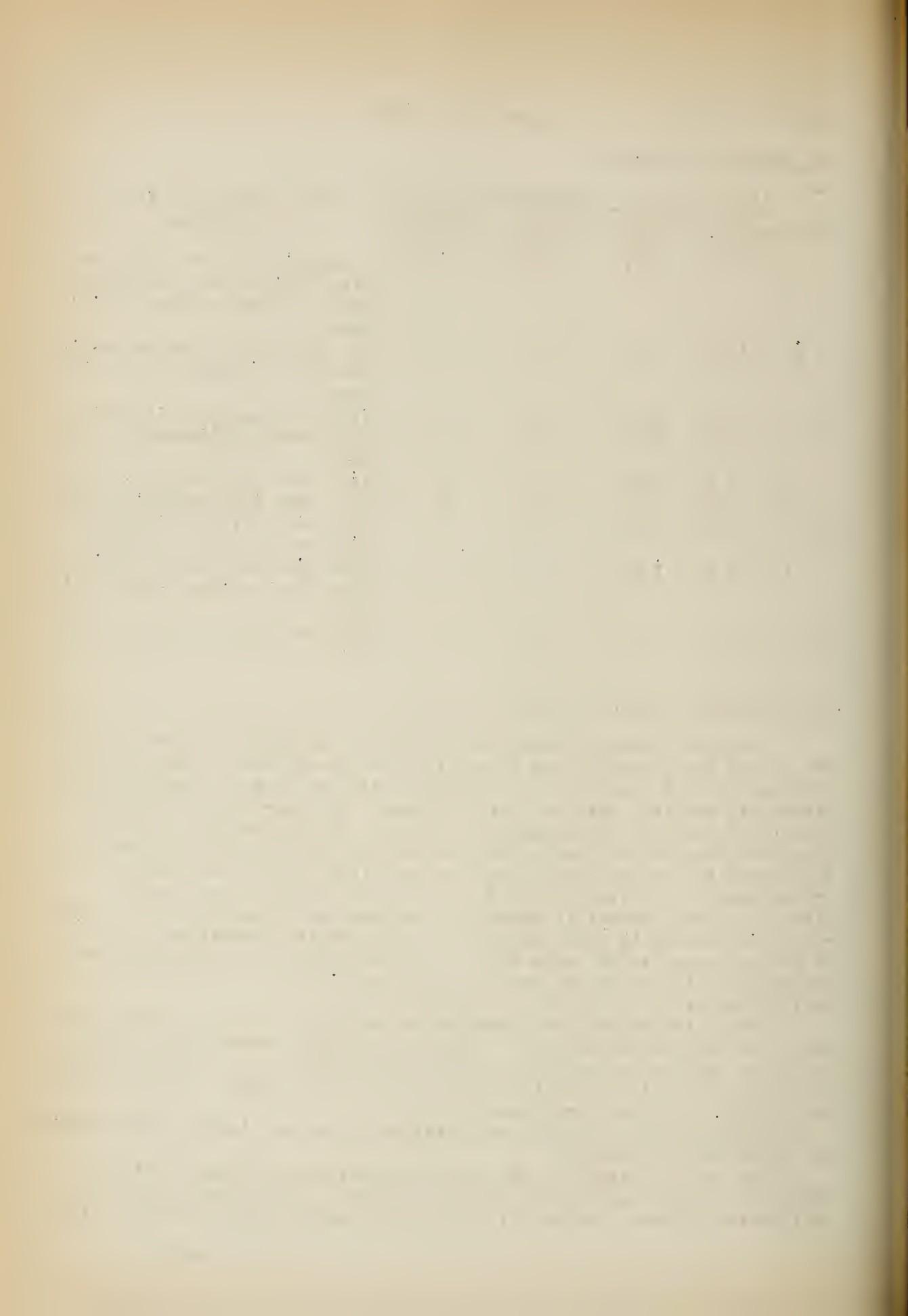
Plat	Grain	Stover	Estimated damage by:		Crop sequence and tillage practice.
			bushels	tons	
14	34.5	2.51	30	5	:Do, except barnyard manure applied after milo, and cowpeas grown for green manure after oats.
:	:	:	:	:	
:	:	:	:	:	
18	32.3	2.22	60	0	:Same as A5-14 except subsoiling practiced following milo and oats.
:	:	:	:	:	
A6-1	7.9	1.76	40	0	:Milo continuously, plow July.
2	23.0	3.22	65	0	:Milo (manure) continuously, plow July.
5	5.1	2.58	90	0	:Milo, plow July; oats, plow May.
13	2.0	1.18	95	0	:Milo, plow fall; corn, plow July.
B4-14	30.9	1.98	5	0	:Milo, plow July; Sudan grass, plow Nov.; cotton, plow Nov.
17	23.5	1.09	15	15	:Milo, plow July; oats (field peas) plow spring; cotton, plow Nov.
B5-17	22.4	1.67	20	10	:Milo, plow July; cotton, plow Nov.
Average	23.4	2.04	43	4	:

In many instances where no midge damage is charged against a plat the damage from birds was so severe that the damage done by the insect, although present, could not be estimated with any degree of certainty and birds were credited with the entire amount. The average yield per acre, calculated from the grain actually threshed, is 23.4 bushels. Assuming that the estimates of damage done are correct, and adjusting the yields to compensate for said damage, an average yield of 44.1 bushels per acre is indicated. Practically all the bird damage was done by sparrows, although a small amount is chargeable to doves and blackbirds. The sparrows were present in large numbers and began their depredations as soon as the grain was in the milk stage. They pay small heed to gun shooting unless actually hit by the shot, and the fact that boys with guns were kept in the fields did little to control them.

The first picking of Kekchi cotton on field AB-8 and on the Herbst tract was made during the week. The early planted blocks of Lone Star cotton in the date-of-planting test on field C-3 was also picked. Other cotton on the station is later in opening and will hardly be ready to pick for another ten days or two weeks.

Summer plowed, and fallow, rotation plats were double-disked during the week for weed control.

Mr. R. D. Martin, of the Crop Acclimatization office, left for Greenville, Texas, August 21. Mr. H. N. Vinall, of the Forage Crop Investigations office, arrived at the station August 23 for a two-day visit.



Demonstrations on Reclamation Projects.Belle Fourche

Nearly the entire time of the week ending August 23 was spent in work in connection with the Butte County Fair, which was held at Nisland on September 2, 3, and 4. Destructive hail storms the past week have greatly injured many fine corn fields, also a few beet fields. It is feared the crop damage will materially lessen the amount of our usually excellent agricultural display, and, to partially make up for this loss, greater effort has been given to the securing of larger and better livestock exhibits. The dairy department will be more extensive than ever, and we hope the feeder stock of lambs and pigs will be as large as last year.

Milk samples were gathered at six farms and butterfat tests run. One county fair board meeting and two club meetings were attended during the week. Blackleg caused the loss of one animal on George Turley's farm. Immediate vaccination has prevented further loss.

Frank E. Miller.

Flathead

Practically every day of the week ending August 23 was rainy, preventing threshing and damaging a considerable quantity of alfalfa which had been cut and not stacked. A considerable amount of moisture was added to the soil, making fall seeding more favorable.

Interest in sheep is again picking up as fall approaches, several parties discussing the sheep situation with the Agriculturist. Several thousand sheep are to be brought into the Flathead project the first part of September for fall feeding and to supply local wants for ewes to start farm flocks.

Heeding a request from the Umatilla project for barley quotations, those locally likely to have barley for sale were interviewed and quotations received and forwarded with samples. Several carloads of barley will be available for shipment. The barley is, for the most part, light in weight this year, although some fields weigh out well.

Two flocks of tubercular poultry were located and treatment advised. Several ranchers interested in culling poultry called at the office for assistance and dates.

One press article on poultry culling and one on the Fair were prepared and distributed. Some club members were visited and one Farm Bureau meeting was attended.

Butterfat raised one cent to 35¢ and 37¢ at collecting station and 2¢ more at the creamery. Creamery butter is selling for 50¢ and dairy butter for 35¢.

L. D. Miller.

Minidoka

The report for the week ending August 16 is as follows:

A large percentage of farmers on the project have mortgages on their cattle. Usually when these notes come due if the farmers are unable to pay them, renewals may be made. Some alarm is felt in view of the partial failure of the beet crop and shortage of other crops, due to the shortage of water, that it might be difficult to renew their paper. After

Minidoka (continued)

some investigation the Agriculturist is of the opinion that most of this paper can be renewed and in every instance where the herd is properly fed and managed.

Failure to get 75,000 hens signed up on the first drive for the organization of the Egg Marketing Association makes a second drive necessary, and considerable time was spent in preliminary work for this drive.

Crop situation, except the beets, is good, considering the shortage of water.

Fifty-seven hundred additional hens were signed up in the drive for the Egg Marketing Association during the week ending August 23.

Boys' and Girls' Calf Club members are preparing their calves for the show at the Cassia County Fair in Durley September 17, 18, and 19.

A project herd is organized for showing at Twin Falls Fair, Durley Fair, Cache County Fair, and Salt Lake State Fair.

The Minidoka County Poultry Association experimented successfully with a new kind of poultry exhibit on Saturday, August 23. Young stock only were exhibited, and they were judged by Mr. Pren Moore, Extension Poultry Specialist, on the basis of development. Ribbons were placed on the birds and some merchandise premiums were given. About 100 head were shown. The ideal development for the birds was considered to be matured at about five and one-half months for the lighter breeds and a little later for the heavier ones. Excellent birds were shown, and it is the expectation of the poultry club to make this an annual affair. The birds were judged in the morning and an instructive program of talks was carried out in the afternoon, the principal ones of these being by Mr. Shearer, the President of the Idaho-Oregon Egg Marketing Association, on the problems of marketing eggs, and Mr. Moore on the feeding and development of the laying hen. Other talks were made by County Agent Barber, Miss Esther Kahle, District Home Demonstration Agent for southern Idaho, and the Agriculturist.

Two cattle sales, one of grade stock, partly Holstein, and the other of purebred Jerseys, revealed a lack of interest in the purchase of dairy cattle at this time. In the grade sale, grade Holstein cows of fair quality sold as high as \$100.00. In the Jersey sale farmers refused to bid and the herd was sold privately after the sale was closed. It was the general opinion that buyers were not interested because of the anticipated high price for hay and scarcity of money, due to failure of the beet crop. One authentic sale of hay is reported at \$12.50 a ton delivered nearby. Sheep men are saying that they will not pay more than \$10.00, and farmers feel that that is not enough for hay this year.

John T. Montgomery.

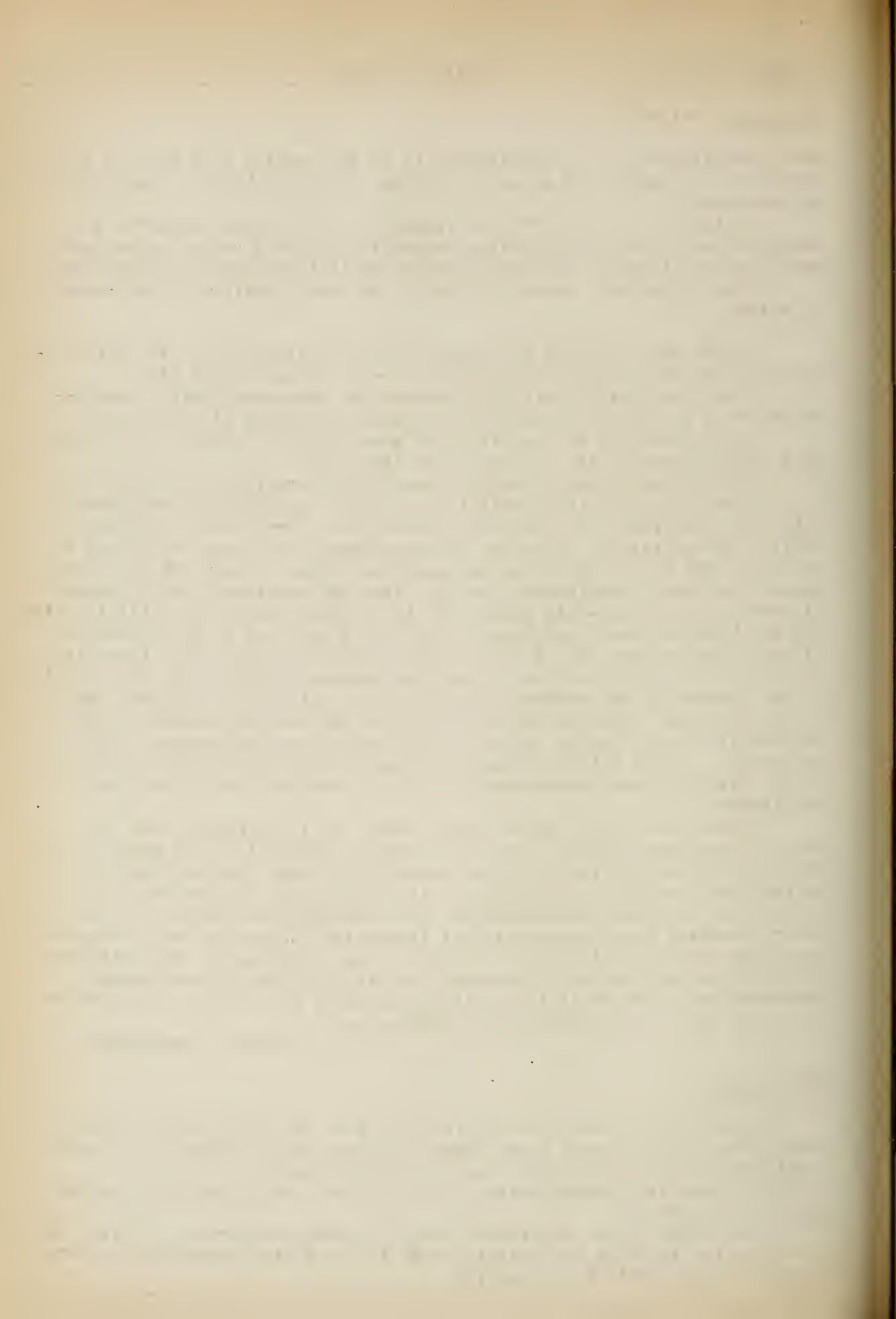
North Platte

A hog cholera break in the lower part of the Valley made it necessary to vaccinate several herds during the week ending August 23. County Agent Nelson cooperated in the work in Morrill County.

A caponizing demonstration was given and about 60 cockerels caponized on Dutch Flats.

Mr. Flack, dairy specialist from the Extension Service, visited the Valley during the week and assisted with the calf club demonstration work in Morrill and Scottsbluff Counties.

D. H. Propos.



Shoshone

The weather has been very favorable for haying during the week ending August 23. Nights have been cool with temperatures two nights close to freezing.

The greater part of the week has been spent in helping with arrangements for the County Fair, visiting club members, and lining up a shipment of sheep.

There were ten farmers who listed sheep for shipment, which would have made over three cars, but when the feeders were sorted out only two cars were ready to go. The shipment will be made up of fat lambs and ewes.

I drove to Clark's Fork Wednesday with County Agent Allen to see the peas being grown under contract. Peas were being stacked and one threshing machine had started. Yields were estimated at 25 bushels. Those farmers with whom we talked seemed to be very well pleased with the returns from their pea crop.

O. J. Grace.

WEEKLY REPORTS

Of the Offices of

WESTERN IRRIGATION AGRICULTURE
and
DEMONSTRATIONS ON RECLAMATION PROJECTS.

Vol. XXV.

August 30, 1924.

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Western Irrigation Agriculture.Huntley

The maximum temperature for the season occurred during the week ending August 30 and made growing conditions more favorable for corn and beets. Corn has been backward due to cool weather during the earlier part of the growing season. The sugar beet crop and third alfalfa crop are in good condition. Hail over a small area at Worden and Ballantine on August 15 did some damage to beets and corn.

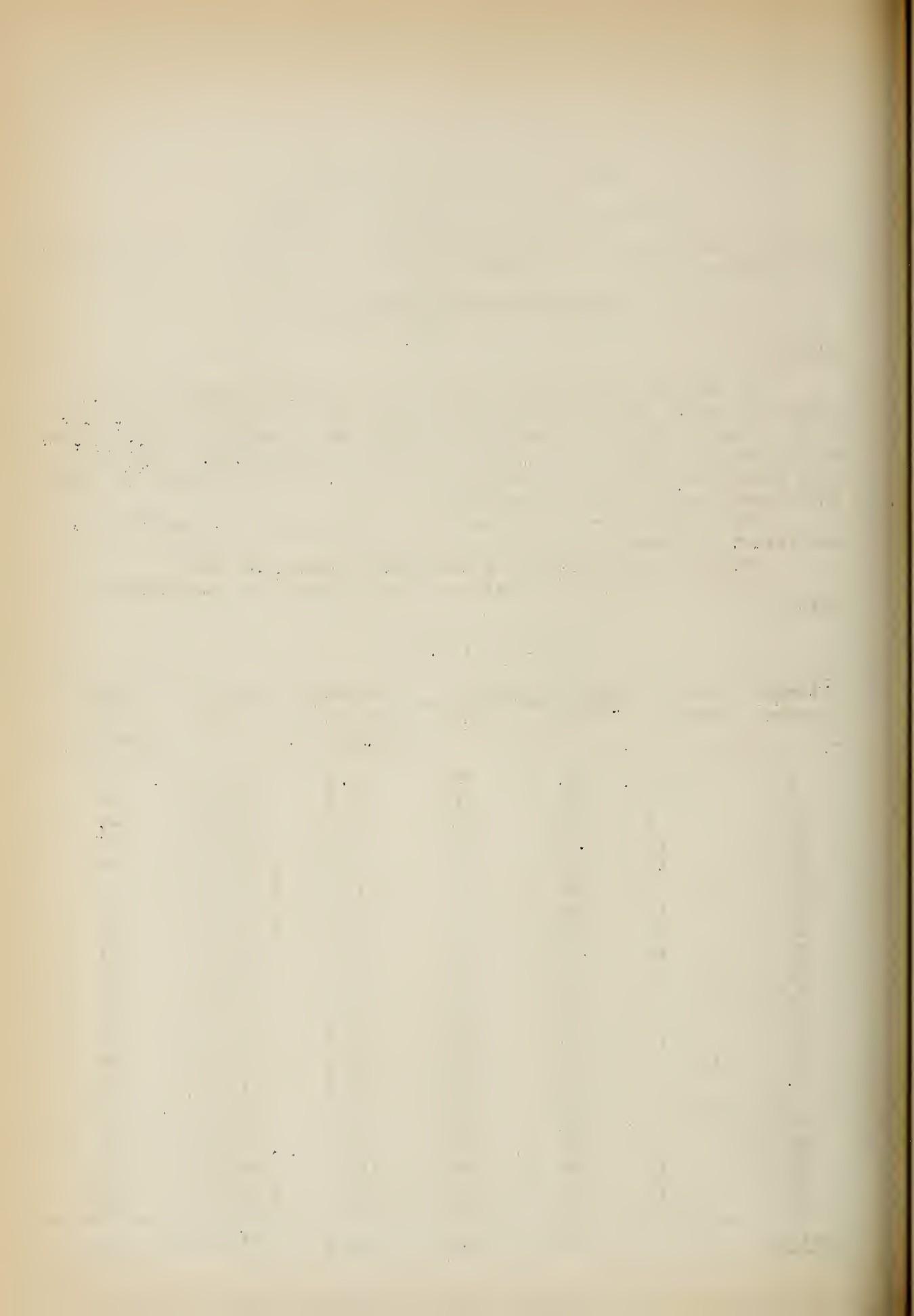
The maximum temperature during the week was 103, minimum 40, and precipitation, trace.

Threshing was completed at the station during the week.

Yields of grain in the rotations are given in the accompanying tables.

Oat Yields in 1924.

Rotation : Plat	: Pounds per Plat	: Bushels	: Stand	: Weight
Number : Number	: Grain	: Straw	: per acre	: per
:	:	:	: Grain	: Bushel.
1 : K- V-21 :	380 :	370 :	47.5 :	836,000 :
16 : - 2 :	580 :	610 :	72.5 :	772,000 :
22 : - 7 :	640 :	700 :	80.0 :	896,000 :
23 : -15 :	780 :	820 :	97.5 :	936,000 :
24 : -10 :	760 :	760 :	95.0 :	1,020,000 :
25 : -IV - 5 :	940 :	990 :	117.5 :	1,056,000 :
27 : - V -19 :	630 :	550 :	78.7 :	916,000 :
28 : -18 :	430 :	500 :	53.7 :	1,016,000 :
30 : -IV -16 :	700 :	680 :	87.5 :	828,000 :
31 : -III -14 :	910 :	960 :	113.7 :	1,064,000 :
32 : - IV -19 :	520 :	510 :	65.0 :	884,000 :
42 : - 9 :	770 :	980 :	96.2 :	868,000 :
44 : -14 :	910 :	1,020 :	113.7 :	1,012,000 :
60 : -III -11 :	960 :	1,160 :	120.0 :	1,028,000 :
61 : - 5 :	910 :	1,070 :	113.7 :	1,116,000 :
1a : L-IV- 1 :	410 :	390 :	51.2 :	904,000 :
34 : - 4 :	580 :	650 :	72.5 :	948,000 :
35 : - 8 :	690 :	700 :	86.2 :	1,124,000 :
46 : -10 :	810 :	1,070 :	101.2 :	1,236,000 :
64 : -17 :	760 :	900 :	95.0 :	1,016,000 :
69 : -24 :	840 :	1,100 :	105.0 :	1,032,000 :
Average :	710 :	785 :	88.7 :	976,571 :
				39



Huntley (continued)

Wheat Yields in 1924.

Rotation:	Plat	Pounds per Plat	Bushels per acre	Stand per acre	Weight per Bushel
Number	Number	Grain	Straw	grain	Bushel
:	:	:	:	:	:
3	K-V-23	160	510	10.7	956,000
5	-II-7	300	650	20.0	1,408,000
7	-8	190	380	12.7	1,052,000
18	-V-3	510	800	34.0	1,008,000
28	-17	250	510	16.7	1,116,000
Average		282	570	18.8	1,108,000

Dan Hansen.

Scottsbluff

The week ending August 30 has been the hottest one of the summer, the average maximum temperature being 93, with a maximum of 97 on the 25th; the average minimum was 53, with a minimum of 50 on the 27th. There was no rain during the week. The total rainfall for the growing season (since April 1) has been 4.74 inches, as compared with 11.03 inches, the average for a 12-year period. Notwithstanding this dry weather, with the exception of the extreme sandy sections, crops are looking very good and the yields have been very satisfactory. Under the Fort Laramie unit of the North Platte project, wheat yielded as high as 56 bushels per acre.

Water has been run continuously throughout the week.

Attached hereto are tables showing the yields of wheat and oats for 1924.

Yield of Wheat in Irrigated Rotations - 1924.

Rotation	Pounds per Plat	Bushels	Ratio of	
Number	Straw	Grain	per Acre	Grain to Straw
:	:	:	:	:
'18	437	328	21.9	1 to 0.75
5	379	326	21.7	1 to 0.86
7	477	198	13.2	1 to 0.42
48	827	558	37.2	1 to 0.67
28	411	304	20.3	1 to 0.74
3	433	242	16.1	1 to 0.56
Maximum	827	558	37.2	1 to 0.67
Minimum	379	198	13.2	1 to 0.42
Average	494	326	21.7	1 to 0.66
:	:	:	:	:

Scottsbluff (continued)

Yield of Oats in Irrigated Rotations - 1924.

Rotation Number	Pounds per Plat Straw	Pounds per Plat Grain	Bushels per Acre	Ratio of Grain to Straw
1	290	285	35.6	1 to 0.98
27	525	270	32.8	1 to 0.52
65	609	516	64.5	1 to 0.85
23	433	422	52.8	1 to 0.97
25	541	514	64.2	1 to 0.95
31	570	500	62.5	1 to 0.88
61	952	738	92.2	1 to 0.78
30	367	388	48.5	1 to 1.11
60	726	629	78.6	1 to 0.87
42	686	504	63.6	1 to 0.79
22	252	243	30.4	1 to 0.96
16	283	322	40.2	1 to 1.14
32	411	289	36.1	1 to 0.70
62	577	558	70.0	1 to 0.77
44	554	581	72.6	1 to 1.05
24	303	282	35.3	1 to 0.93
45	453	422	52.7	1 to 0.93
64	626	544	68.0	1 to 0.87
48	548	607	76.9	1 to 1.11
28	324	241	30.1	1 to 0.74
71	507	468	58.5	1 to 0.92
Maximum	952	738	92.2	1 to 0.78
Minimum	252	241	30.1	1 to 0.96
Average	502	404	55.5	1 to 0.88

James A. Holden.

Yuma

100°,

For the two-week period ending August 30 the maximum temperature was ^{100°} / the minimum was 55°, greatest daily range was 49°; no precipitation was recorded.

For this period the nights have been warmer and higher humidities have been recorded during the daytime than for the previous week. Conditions, however, are quite satisfactory for growing crops. Cotton ginning is well under way on the Project with 300 bales turned out to date. The local price of cotton has been around 22 to 23¢. There is still very little activity in the alfalfa seed market, and about two-thirds of the crop remains unsold. The flow of the Colorado River has reached a new low record of 2600 second feet. In the latter part of the week, however, there was a slight rise.

Station work performed during the last two weeks has consisted mostly of plowing and disk ing nursery plats, manuring and plowing garden, removing palm and Arbor-vitae trees in the park lands, repairing boiler in the date house, hoeing weeds on the rotations, general irrigation and

Yuma (continued)

cultivation.

Mr. T. H. Kearney visited the station on August 19 and Mr. C. J. King and Dr. Peltier, of Sacaton, Arizona, on August 26.

E. G. Noble.

Demonstrations on Reclamation Projects.Belle Fourche

Mr. H. M. Jones, dairy specialist of the State Agricultural College at Brookings, spent one and a half days on the project during the week ending August 30 in coaching livestock teams that are to give demonstrations at the county and state fairs. One trip was made to Sturgis with the dairy club members in judging two herds of Holsteins, and one day was spent on the project in judging Ayrshires.

Milk samples were gathered at one farm and butterfat test run. One-half day was spent on the project with Mr. Bober in the interest of feeder-pig exhibits for the Butte County Fair.

One day was spent at Faith by the agriculturist in judging livestock for the Meade County Fair. Mr. D. J. Winkjer of the Dairy Division is now on the project. There is a possibility of a bull association being formed on the project in the near future.

One community meeting was attended during the week and one article written for publication.

Frank E. Miller.

Flathead

The weather during the week ending August 30 was very warm, with the exception of Friday night when a general frost occurred in the Valley, damaging corn and the more tender garden crops. Considerable ice was in evidence in the early morning. In the Moiese Valley the frost was light, but around Ronan the corn suffered considerably.

Mr. A. C. Cooley arrived on Monday morning and left the project on Wednesday afternoon.

Two club picnics were attended and one Central Water Users' Meeting at which Congressman Leavitt was the principal speaker. The farmers seemed well pleased with the meeting. One day was spent in the Moiese with the local club leader inspecting club pigs and calves and ear-tagging those pigs entered in the Scearce Pork Production contest. The Lake County Dairy Juniors also had a regular business session at their picnic at the Dixon Ranch.

One poultry culling demonstration was conducted in the Moiese at J. Johnson's home. Two hundred and fifty hens were examined and 100 culled out. Another flock which had experienced losses was examined.

Considerable attention was given during the week in arranging for locations to have Miss Cushman, poultry specialist from Bozeman, conduct turkey killing, picking, and packing demonstrations and take up a discussion of marketing and markets.

A considerable number of calls for help to take care of the second crop of hay came to the office. Reports reveal that three men reported for duty through this office; the others wanting work were inclined to

Flathead (continued)

favor threshing work.

Eggs are selling at 30¢ and butterfat for 35¢ and 37¢ at the local cream station.

L. B. Miller.

Minidoka

The most interesting matter in the work of the week ending August 30 was the attendance at the Ninth Annual Ram Sale at Salt Lake City. Two fine rams were purchased by project farmers to add to purebred Hampshire flocks. An interesting conference was had with Mr. Dorman and Mr. Murdock of the Western Dairy Division. There seemed to be an undercurrent of opinion among sheep men that there was a tendency to reduce the size of range flocks, due to scarcity of grass on the range and the high price of hay. There are about two hundred head of excellent purebred Hampshire ram lambs on this project for sale. These lambs are old enough for service and should prove valuable in range flocks. Livestock health on the project remains excellent. There is some complaint of blackhead in turkeys but in few and isolated cases.

J. T. Montgomery.

North Platte

Two pig clubs finished their 100 days during the week ending August 30. The pigs were weighed and records closed. Most of the pigs have made a good growth and will make a good exhibit at the County Fair September 17 to 19.

A good full day was spent in the lower part of the Valley in the vicinity of the hog cholera outbreak. Over 300 hogs were vaccinated on five different farms. Most of the herds in the community are vaccinated now, and it is hoped there will be no further spread of the disease.

It is only two weeks until the County Fair and plans are being made for boys' and girls' clubs and bull club exhibits.

D. H. Propos.

Shoshone

The weather has been hot and clear during the week ending August 30. The second cutting of alfalfa will soon be in the stack although there are a few fields that are not yet cut. Harvesting started a week ago and considerable grain was harvested this week. However, there is still a fourth or more of the grain to be harvested. Two threshing machines started this week.

The greater part of the first four days of the week was spent in assisting with the County Fair. Livestock exhibits were light, due in part at least to poor accommodations on the Fair grounds. The poultry exhibits were also light but of good quality.

Mr. A. C. Cooley spent the last two days of the week on the Project.

O. J. Grace.

W E E K L Y R E P O R T S

Of the Offices of

WESTERN IRRIGATION AGRICULTURE
and
DEMONSTRATIONS ON RECLAMATION PROJECTS.

Vol. XXV.

September 6, 1924.

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Western Irrigation Agriculture.

Newlands

The meteorological data recorded at this station for the week ending August 30 follows:

Mean maximum 95.9, maximum 100 on the 27th; mean minimum 52.3, minimum 48 on the 31st. There was no rainfall.

The farm work has consisted of cleaning ditches, hoeing weeds, and building fences. There has been one irrigation given. The plats irrigated were B-5, 6, 11 to 22; D-2, 3, 4, 6, 7; E-3, 4; F-1, 2, 3, 4, 7, 8, 10, 12, 13, 14, 15, 16; H-1, 2, 3, 4, 5, 13, 14, 15, 16, 17, 18, 19; and $\frac{1}{2}$ to 13.

The following table gives the results of the use of fertilizer on cantaloupes. These results tend to show that acid phosphate has a decided effect on increasing the yield; the use of potash is detrimental; and evidently nitrates are not needed.

No.	Treatment	Yield	Average	Effect of fertilizer on yield	
			yield adjoining checks.	Lbs.	Per cent
1	Check	440			
2	N K P	509	438	+ 61	+ 14
3	Check	437			
4	K P	448	468	- 20	- 4
5	Check	499			
6	N K	366	482	- 116	- 24
7	Check	465			
8	N P	548	467	+ 81	+ 17
9	Check	469			
10	K	364	431	- 67	- 16
11	Check	393			
12	P	467	384	+ 83	+ 22
13	Check	375			
14	N	345	357	- 12	- 3
15	Check	339			

N = nitrate of lime.

K = potash.

P = acid phosphate.

Scottsbluff

The average maximum temperature for the week ending September 6 was 85 with a maximum of 93 on the 3rd; the average minimum was 49 with a minimum of 43 on the 2nd. There was no rainfall.

During the week the beets in D and K and the beets, corn, and potatoes in field K were given another irrigation. Some miscellaneous work was done such as getting the machinery ready for harvesting corn and filling silos.

The condition of the beet crop has improved considerably the past two or three weeks. It is now believed that the tonnage in the Valley will be greater than last year and that the sugar content will be greater even than the 1922 record. The final payment on the 1923 crop will be made soon after October 1.

James A. Holden.

Belle Fourche. Demonstrations on Reclamation Projects.Belle Fourche

The County Fair held at Nisland took practically all of the agriculturist's time for the week ending September 6. The agricultural and livestock exhibits, with the exception of dairy animals, were not as plentiful as last year due to very serious hail storms and the relative high price of grain, which tended to shorten the feed rations thus retarding the growth of animals in the feeder classes and lessening the number of exhibits.

The Fair was characterized this year by the big part taken by club members. Two girls' clubs with their leaders as chaperons stayed during the Fair in tents and so did many of the boys. Interesting and entertaining demonstrations were on the program every morning. One dairy judging contest between Butte and Lawrence counties was held Tuesday morning and resulted in an easy victory for the Butte County team. The Project Ayrshire Club exhibited 22 animals. A livestock parade was held two afternoons, and the club members with their fitted and decorated animals received much comment.

Twelve club members with their leaders are to leave early Sunday morning for Huron to attend the State Fair.

Frank E. Miller.

Newlands

The principal activity on the Newlands Project during the three-week period ending August 30 has been the harvesting of cantaloupes. All the growers report excellent yields and very rapid ripening. The warm days and nights have hurried up the ripening process materially. Six to eight cars a day are shipped east and one to two carloads a day are sent out by express and parcel post to near-by points. A very satisfactory price is expected this year. The first shipments showed a net return of about \$1.50 a cwt to the grower.

Owners of beef cattle and sheep, and dairymen from Western Nevada and Northern California are coming in with their herds in increased numbers. Eight big bands of sheep have already arrived on the project, and several herds of cattle have been unloaded in the Fallon and Fernley districts. There is yet unsold approximately 20,000 tons of hay, and a number of hay growers are getting anxious about a market. The sales of

Newlands (continued)

hay so far have been at prices ranging from \$13.50 to \$15.00 per ton in the stack.

The major part of the time during the week was taken up with matters pertaining to the herd testing work and with correspondence, etc. which accumulated during the time when annual leave was taken.

During the week ending September 6 some time has been given to a plan for advertising the surplus hay of the project for the purpose of attracting dairymen, beef cattle and sheep feeders from the northern half of California and Eastern Nevada. This advertising is paid for by an assessment of one cent a ton on the hay that is sold. Those contributing to the advertising will be given first opportunity to do business with parties responding. Advertisements have already been placed in fourteen county papers.

It has been estimated that the surplus alfalfa hay on this project will amount to about 26,000 tons. About 8,000 tons have already been disposed of, leaving 18,000 tons yet to be marketed. Practically all of this hay must be fed on the project, and the advertising efforts are for the purpose of attracting outside stockmen to bring their herds here for winter feeding.

The Newland's Project has practically the only surplus hay now left for sale in this section of the country, and it is expected that a market will be found for all of it before hay-making time next year. Sales are being made at \$15.00 a ton in the stack at the present time.

Correspondence has been sent out for the purpose of locating a Guernsey and a Jersey bull, backed by high production, for two local dairymen. These herds have been headed by bulls backed by 600 pound records, and it is not very easy to secure new bulls that will continue improvement in production.

The cantaloupe harvest continues to be good. Up to this time 130 cars have been shipped from the Fallon district alone. The price started off very excellent, but has shown some downward tendency the last week.

L. E. Cline.

North Platte

During the week ending September 6 a trip was made to Lincoln to attend the State Fair in the interest of a Boys' and Girls' Club dairy cattle judging contest. Six teams of three members each entered the contest. The winning team gets a free trip to the National Dairy Show this fall. The expenses are paid by the Omaha National Bank.

D. H. Propps.

Shoshone

The week ending September 6 has been favorable for haying. Sunday was cold and cloudy with a light shower. Monday morning there was a light frost, which did very little damage. Beans were the only crop showing it and only the upper leaves were killed. The remainder of the week was warm and beans and corn are maturing rapidly.

I drove to Meeteetse Monday to meet some of the range sheep men and get something definite on prices of old ewes. Broken-mouthed ewes are being held at \$5.00 for first of October delivery; young breeding ewes are

Shoshone (continued)

priced at \$11.00 and lambs at \$11.00 per cwt.

We have received a report on the lambs shipped the week before. The killers sold for \$12.90 at Omaha and the feeders for \$11.00. One small lot of these lambs dropped in March netted \$10.30 a head, and another lot dropped in May netted \$9.02 each.

O. J. Grace.

Uncompahgre

During the week ending August 23 two trips were made with live-stock clubs to judge stock, one trip being to a ranch on Log Hill Mesa where some of the best range cattle in this part of the State were seen. The fat stock have been gathered from the range and are being held in fenced pastures which are set to timothy and red clover. The cattle were wild but were in good corrals, and as they were well bred and in good condition they gave the clubs some good training. Most of the club members are showing very satisfactory progress in stock judging, and results of their work in this line are becoming apparent in the improvement of the livestock kept on their farms. The stock judging contest to select a team for the State Fair will be held on Saturday of next week. It will be necessary to go to the farms to see the various classes used in this contest, and some time has been required this week to make arrangements for the stock.

Several men who contemplated starting farm flocks of sheep were visited with reference to going to the Salt Lake ram sale to see the stock offered there and buy foundation stock if it seemed feasible. However, none of them were ready at this time to make the start, except one man who is planning to buy a small band of range stock locally.

Some miscellaneous work was done in connection with livestock diseases, poultry house plans and construction.

A meeting of the Lions Club at Delta was attended, at which all members and leaders of boys' livestock and crops clubs of Delta County were guests. State Senator J. J. Tobin, manager of the Montrose Fair and secretary of the State Fair Association, who is a strong advocate and supporter of boys' and girls' clubs, was the principal speaker on the program. The Lions Club is much interested in this work and is promoting it wherever possible.

Markets: (no sales reported)

Alfalfa, \$6.00, \$8.00/	Butterfat, 31¢
Barley, none available	Eggs, 30¢
Corn, \$2.25 cwt.	Chickens, Hens 8¢, 14¢
Oats, \$1.75, \$2.00 cwt.	Springs 16¢
Wheat, \$1.80, \$1.85	Beef cattle, \$10.10 top
Potatoes, 75¢, 90¢	Hogs, \$9.60
	Sheep, \$13.40.

All contests to choose demonstration teams for the State Fair were held during the week ending August 30. Clothing clubs competed at Olathe on Friday, and canning, cooking, and baking clubs at Montrose on Saturday. A stock judging contest also was held on Saturday. Six teams were selected in addition to a poultry demonstration team already designated. One day was spent with the club leader of Delta County visiting club members and making arrangements with the officials of the Delta County Fair for

Uncompahgre (continued)

demonstrations at that Fair.

The D. & R. G. W. Railroad is offering exceptionally low rates to club members that wish to attend the State Fair this year. The regular one-way fare from Montrose to Pueblo is \$11.40, and the special round-trip fare for all club members is about \$7.20. A special train will run from Montrose to Pueblo, a round-trip rate to the public of \$13.00 being offered.

Two flocks of poultry were culled this week. One was a large mongrel flock of late-hatched birds, which were nearly all rejected. The other was a well-bred flock in which less than 15 per cent culls were found.

County agent King closed his work in Montrose County this week and will move to Grand Junction to take up similar work there at once. Mr. King has served Montrose County for over five years and has made an enviable record. The County Four-H Club gave a farewell party for him on Saturday evening following the contests held during the day. Mr. R. H. Tucker, a graduate of Colorado Agricultural College, will take Mr. King's place, but he has not yet arrived.

Markets:

Alfalfa hay, not selling	Butterfat, 29¢
Barley, none available	Eggs, 35¢
Corn, \$2.25 cwt.	Hens, 8¢, 12¢
Oats, \$2.00	Springs, 16¢
Potatoes, 75¢	Beef cattle, \$10.00
Wheat, \$1.75 cwt.	Hogs, \$9.85
	Sheep, \$13.00.

H. A. Ireland.

W E E K L Y R E P O R T S
Of the Offices of
WESTERN IRRIGATION AGRICULTURE
and
DEMONSTRATIONS ON RECLAMATION PROJECTS.

Vol. XXV.

September 13, 1924.

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Western Irrigation Agriculture

Newlands

The meteorological data recorded at this station for the two-weeks period ending September 13 follows:

Mean maximum 86.6, maximum 94 on the 1st; mean minimum 46.4, minimum 34 on the 11th. There was .05 of an inch of rainfall on the 7th.

The work at the station has consisted of cleaning ditches, hoeing weeds, discing, and filling the silo. Plats H-6, 7, 8, 9, 10, 11, 12, 20, 21, 22, 23, 24, 25, and 26 have been disced and leveled in preparation for the seeding of rye.

The corn from the rotation plats has been cut and put in the silo. The following tables give the yields of these corn plats:

<u>Plat</u>	<u>Area acres</u>	<u>Treatment</u>	<u>Yield lbs.</u>	<u>Yield per acre</u>
D-4	.34	Rotation	3,290	9,677
E-3	.58	Manure	5,460	9,414
E-4	.59	Unmanured	5,180	8,779
F-4	.25	Rotation	2,275	9,100
F-16	.25	Rotation	3,370	13,480

There has been one irrigation given to the following plats: B-7, 8, 9, 10; C-2, 10, inclusive; H-6, 7, 8, 9, 10, 11, 12, 20, 21, 22, 23, 24, 25, 26.

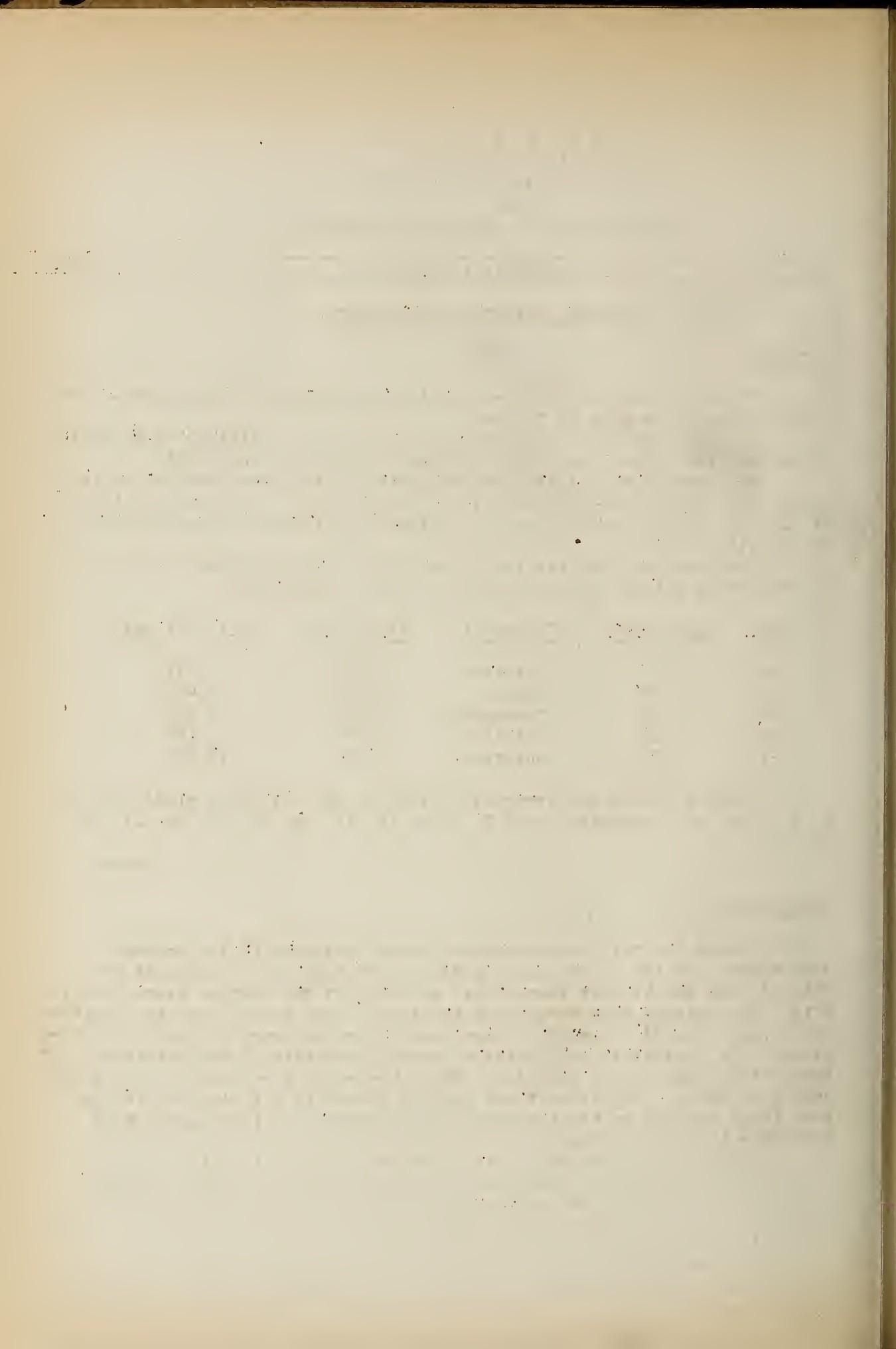
E. W. Knight.

San Antonio

During the three-weeks period ending September 13 the maximum temperature for the season was recorded - 104 degrees F. on August 25. This is also the highest temperature recorded at the station since July 19, 1918. The minimum temperature for the three weeks was 58, and the greatest daily range was 37. Seventeen days were clear, one partly cloudy, and three cloudy. On September 2 the first measurable quantity of precipitation, .07 inch, since June 22 was recorded. This shower was very local in its nature and of no value. The drought was finally broken by a series of more or less local and intermittent showers which amounted to 1.98 inches from September 11 to 13 inclusive.

The damage to unpicked cotton from this rain will not be heavy. Summer and fall plowing, which had been stopped because of the extremely hard, dry condition of the soil in the "black land" area, can now be resumed. Dry-land pastures and meadows were in serious condition and will be greatly benefited.

The sorghum varieties on field C-4 were threshed during the period and the following table gives a summary of the agronomic data recorded for the season.



San Antonio (continued)Sorghum Variety Test, 1924.

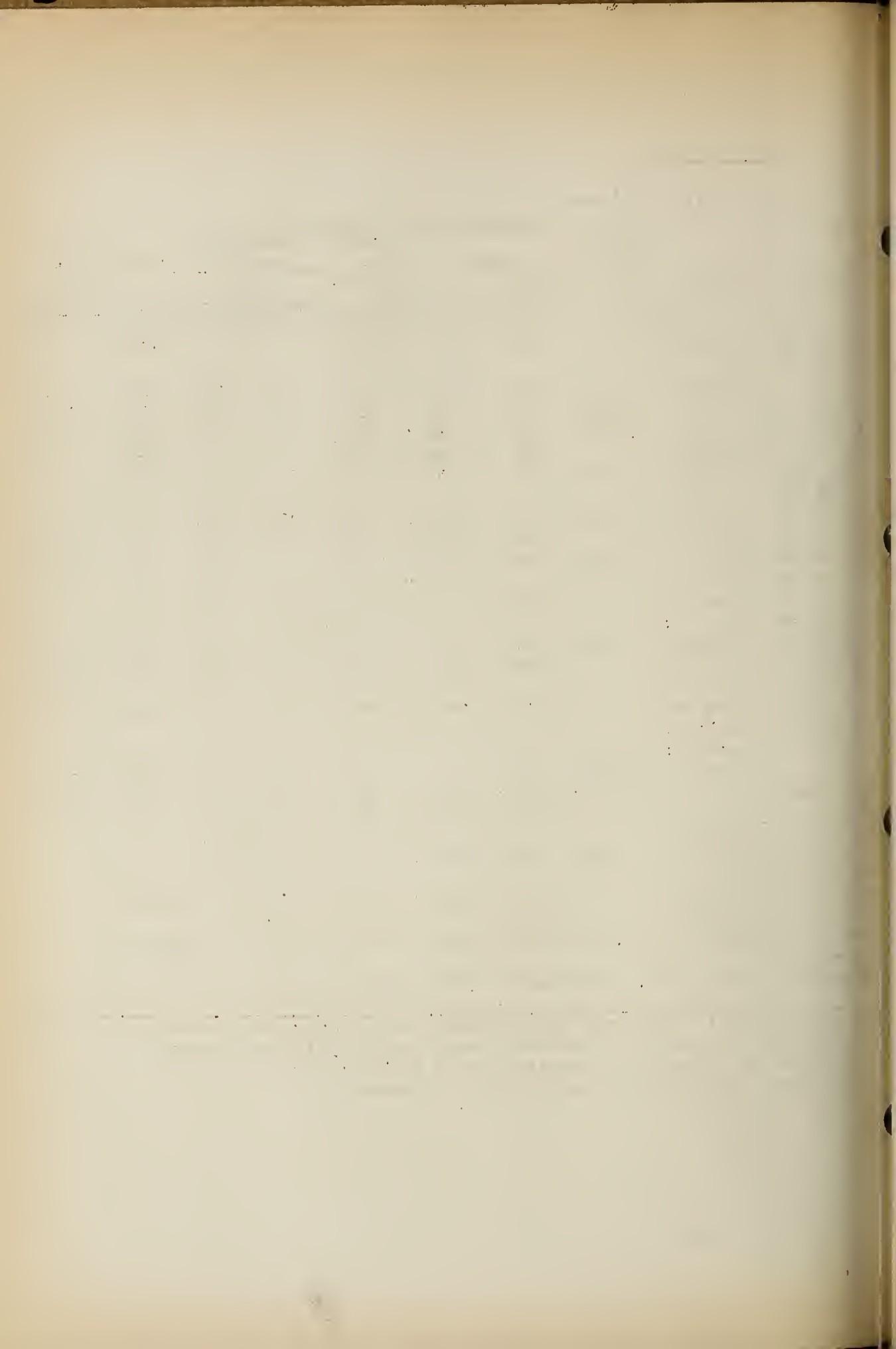
Variety	Source	Number F.C.I. or S.P.I.	First Date	Height at harvest	Estimated damage	Yield per acre		
						Birds	Midge	Grain
				(inches)	(%)	(%)	(bushels)	(tons)
Milo (check)	S.A.E.F.		6/2	7/9	54			19.3 : 1.60
Dwarf hegari	Hays, Kansas		5/31	7/9	56	40	20	22.7 : 2.00
Peterita	F.C.I. 2,314		6/1	7/9	60	20	30	17.0 : 1.68
Spur Peterita	F.C.I. 3,232		6/5	7/16	64	5	0	19.8 : 7.43
Check	S.A.E.F.		6/2	7/16	50			14.5 : 1.35
Sunrise Kafir	F.C.I. 2,167		6/8	7/16	80	70	15	5.8 : 3.15
Dwarf Black-hull Kafir	F.C.I. 2,316		6/8	7/16	52	40	35	7.5 : 1.50
Check	S.A.E.F.		6/2	7/16	48	0	60	9.2 : 1.15
Darso sorgo	F.C.I. 1,530		6/11	7/16	50	0	60	24.1 : 2.90
Shrock kafir	Huth							
Manchu brown	Seed Co. Hays, kaoliang	C.I. 171	6/15	8/21	62	35	60	(2) : (2)
Check (1)	S.A.E.F.		6/2	7/9	50	5	10	25.8 : 1.55
Sumac sorgo	Huth							
Sumac sorgo	Seed Co. Chilli-cothe, Texas	C.I. 35,038	6/7	7/9	78	0	0	35.9 : 3.05
Orange sorgo	F.C.I. C.I. 490		6/12	7/9	84	0	0	15.9 : 3.33
Check	S.A.E.F.		6/2	7/16	52	10	25	11.1 : 1.65
Foney Sorgo	Chilli-cothe, Tx	3167	6/28	8/21	96	(3)	(3)	
Dwarf broom-corn	Huth							
Acme broom-corn	Seed Co. Woodward		6/10	7/1	60			633 (4)
Standard broomcorn	Okla. C.I. 243		6/13	7/2	60			705 (4)
	do C.I. 556		6/17	7/2	100			695 (4)

1) This check plat is the only one on which a satisfactory stand was secured.

2) Practically no stand of Shrock was secured and variety not harvested.

3) Very late in maturing and practically all seed destroyed by birds.

4) Well cured broom straw of good quality, in pounds.



San Antonio (continued)

The sorghum variety test was originally planted March 8, but due to wet soil and continued wet, cold weather following no stand was secured. Replanting was done March 27, which resulted in good stands of some varieties and very poor stands of others. All milo (check) plats were very poor except the one noted otherwise in the table.

Rotation plats A6-17, B4-12, 13, and B5-6 were harvested. A clean crop of Sudan grass was secured from A6-17 while the crop sorgo in 8" drills, consisted almost entirely of Johnson grass and pig weeds. Weeds on portions of fields ABC7, A-3, B-3, and E-3 were also mowed.

Cotton picking was continued throughout the period, the first picking now being completed from fields AB-8, C-3, and 19 of the 30 rotation plats. Wet weather early in the season which resulted in weedy fields, heavy infestation of the fields by both the cotton boll weevil and the "cotton flea," and severe drought conditions which prevailed through August and early September have all depressed cotton production; and from fields already picked it appears that the average yield will be somewhat under one-fifth bale per acre.

Other operations during the three-weeks period included the harvesting of rotation sorghum plats (4.1 foot rows); the plowing of the garden and field F-3; the ginning of cotton from which planting seed is to be saved; the chopping of Johnson grass from miscellaneous rotation plats; and the repair of buildings, fences, and equipment.

Dr. Geo. L. Peltier, Pathologist at Nebraska University, on special duty with the U. S. Department of Agriculture in connection with the study of cotton rootrot, was a station visitor from September 8 to 11 inclusive.

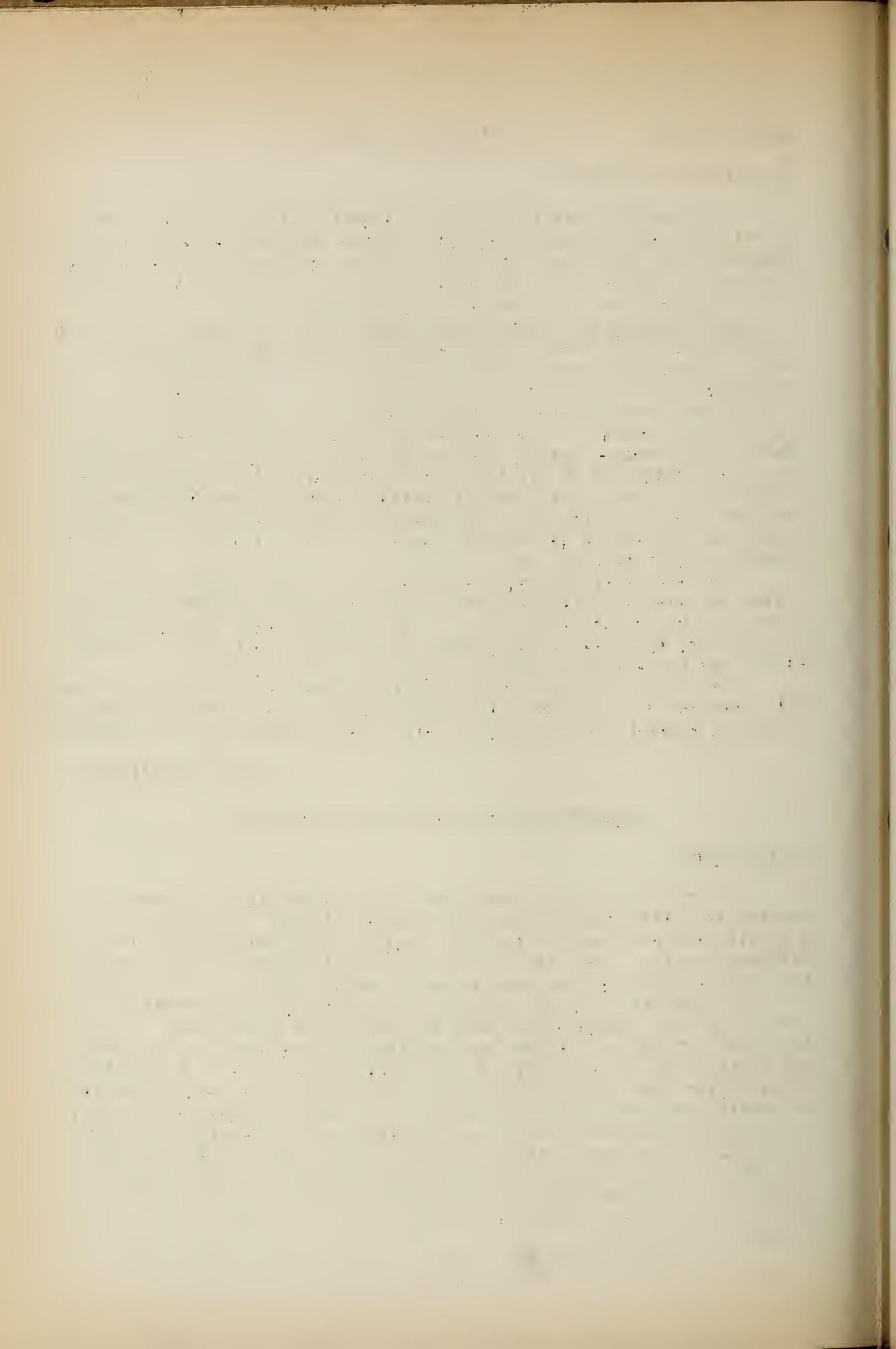
Geo. T. Ratliffe.

Demonstrations on Reclamation Projects.Belle Fourche

For the week ending September 13 the entire time was spent attending the State Fair at Huron or in travel to and from Huron. Three cars with ten club members left the project Sunday morning and returned Saturday evening. Two girls' teams, one poultry team, a dairy-judging team, and a demonstration team in dairy judging were taken to the Fair.

The poultry team got second place, while the livestock teams in judging and the demonstration team in judging got first place. The girls' teams did not score, but gave very creditable demonstrations in sewing and baking. The dairy-judging team of three members won out by only $2\frac{1}{2}$ points after four hours of real work in placing six classes of livestock and writing reasons for their placing. The dairy demonstration team in judging of two members gave a very practical and interesting demonstration in the placing of three animals and the reasons why. This team made a fine impression in the way they answered the many questions asked near the close of their demonstration. The two livestock teams are awarded trips to the National Dairy Exposition, where they will compete against the best teams in the country.

All club members taken on the trip representing Butte county are from the project, and the fine work done by the club boys and girls gave



Belle Fourche (continued)

the county second place among the counties of the State. One club girl received two blue ribbons on her sheep in the club class and second in the open class. One boy received second on his ram Rambouillet lamb; another took two prizes on Shropshire lambs. The distance and costs of transportation prevented the shipping of any of our fine dairy club animals.

Mrs. Frank Gammons purchased a prize-winning yearling Rambouillet ram at the Fair, and Hal Follette purchased two fine Shropshire sheep.

Frank E. Miller.

Flathead

Mr. Miller reports as follows for the week ending September 6:

The weather continues warm for the most part during the day and quite cool to cold in the evenings. The corn crop will probably do no better than to make good fodder.

Several days of the week were used in making a survey of the Little Bitterroot and Mission Valleys to observe the general conditions at this time of the year, to learn more definitely the turkey situation, and to arrange for the poultry demonstration to be conducted with the aid of Miss H. E. Cushman. Three days have been provided for. The local and Polson exhibits were also given attention at the same time.

The acting secretary-treasurer of the C. T. A. was given considerable time to acquaint him with the details of the work, he having just assumed those duties. The tester also was given time for two conferences and assisted with the monthly report.

Butterfat rose to 36 and 38 cents at the receiving station and 2 cents higher at the creameries. Eggs are 30¢ a dozen; spring chickens, 18¢ a pound.

L. B. Miller.

Minidoka

On Sunday night of the week ending September 6 the project was visited by a severe frost, which killed corn in low places, frosted all tender vegetation like tomatoes and beans, and did some damage to the field beans. Just how much damage was done will not be known until the beans are threshed. Growers expect immature beans to be shriveled.

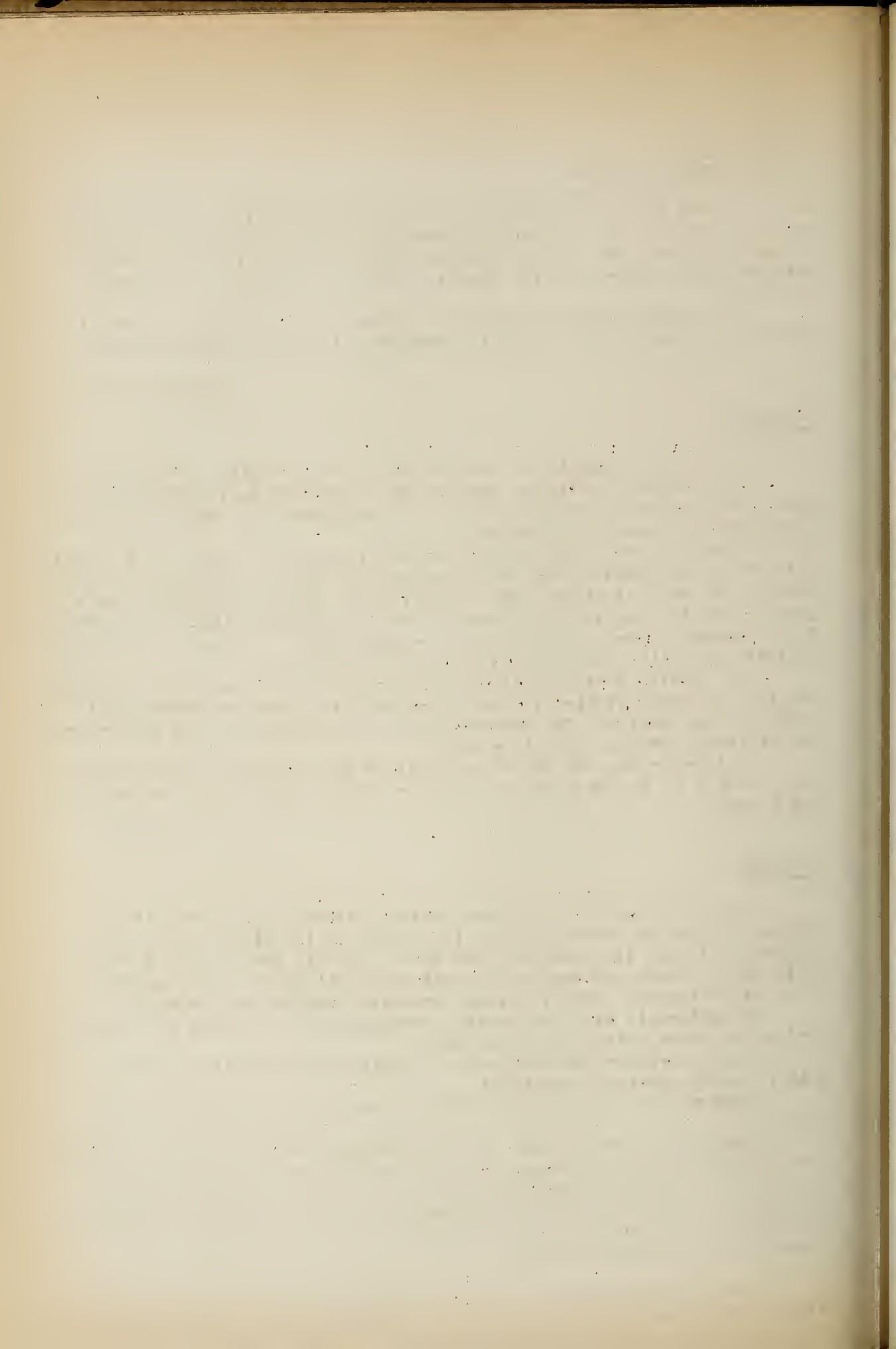
Considerable time was spent in organizing and getting the project herd of Holstein cattle ready for show.

One outbreak of hog cholera is reported in the Boise Valley. Animal health continues excellent.

Farmers are buying small flocks of breeding ewes out of range bands.

Thursday was spent going over the project with Mr. Cooley, visiting farms on which flocks of sheep are kept and inspecting sweet clover pastures. Mr. Cooley was much impressed with the value of sweet clover as a pasture on this project; he was surprised at the increase in the number of farm flocks of sheep and much pleased with the quality of breeding flocks that are being built up.

Three days of the week ending September 13 were spent in judging stock at the Twin Falls County Fair and arranging for the transportation



Minidoka (continued)

of exhibits from that Fair to the Project Fair at Burley.

The rest of the time was spent with local breeders in selecting their show animals and in instructing them in preparation of same for show.

John T. Montgomery.

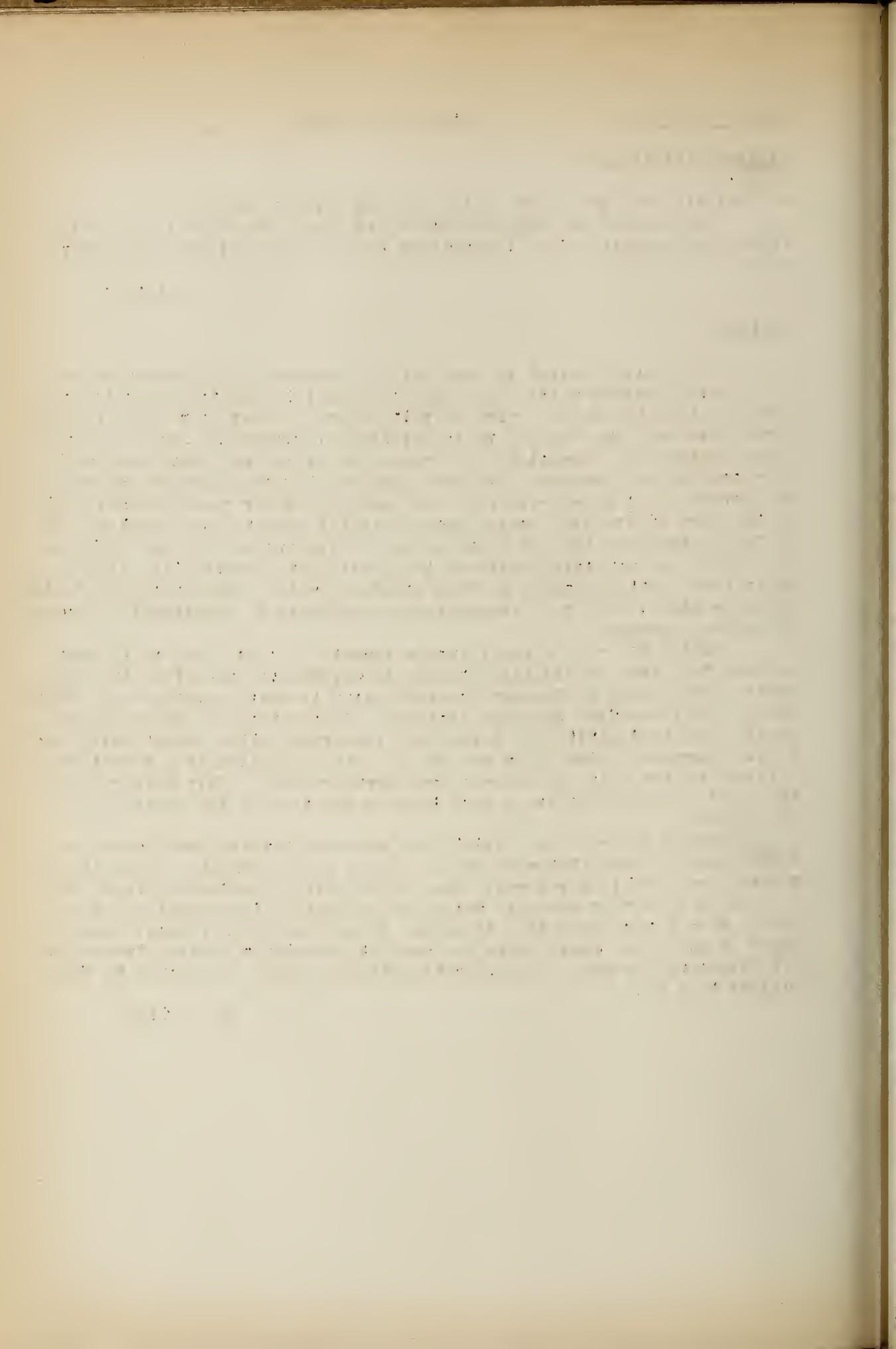
Newlands

Mr. Cooley visited the project on Wednesday and Thursday of the week ending September 13. Some time was spent in visiting over the project and in reviewing the work of this office. Visits were made to some turkey growers, who have as their principal industry the growing of turkeys, having made a specialty of growing wheat and corn this year to be harvested by the turkeys. Our most successful turkey growers are making it a practice to keep grain feed accessible to their turkeys continually in the form of standing grain, such as millet, wheat, corn, barley, etc. By this method the turkeys reach an early maturity on feed to which has been added no harvesting cost and in addition are continually getting their feed on clean ground or from standing grain. This system of feeding helps greatly in sanitary precautions, which must be continually exercised in growing turkeys.

During the week a local farmer imported a dairy herd of 16 cows and one bull from an adjoining county in California where feed is very short. Other project farmers are interested in making purchases of dairy cattle and sheep from the same district. Importations of sheep, dairy cattle, and beef cattle are being made into this Valley almost daily for feeding purposes. Some help was given in the selection of a registered Holstein heifer that was shipped from northern Utah. This heifer is of the Ormsby breeding as are a very large percentage of the Holsteins of this Valley.

During the week one article was prepared for the local press on the subject of farm flocks of sheep. Local farmers who have farm flocks report very excellent returns. Just at this time foundation flocks can be secured at very reasonable prices on account of feed shortage, thus making this a very good time to secure these foundation flocks. Large bands of sheep are coming into the project for winter feeding from which selections can be made. Considerable attention will be devoted to this subject this fall.

L. E. Cline



W E E K L Y R E P O R T S
Of the Offices of
WESTERN IRRIGATION AGRICULTURE
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Vol. XXV.

September 20, 1924.

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Western Irrigation Agriculture.

Newlands

The meteorological data recorded at this station for the week ending September 20 follows:

Mean maximum 76.9, maximum 88; mean minimum 39.7, minimum 26; precipitation .01 inch.

The plots H-6 to 12 inclusive, H-20 to 26 inclusive, and B-7 to 10 inclusive were smoothed and harrowed and planted to rye.

The corn on H-17, 18, and 19 is being husked. As soon as this work is done the yields of the different plots will be given.

The results of the pig-feeding experiment up until the time they were placed on self-feeder is given in the following tables:

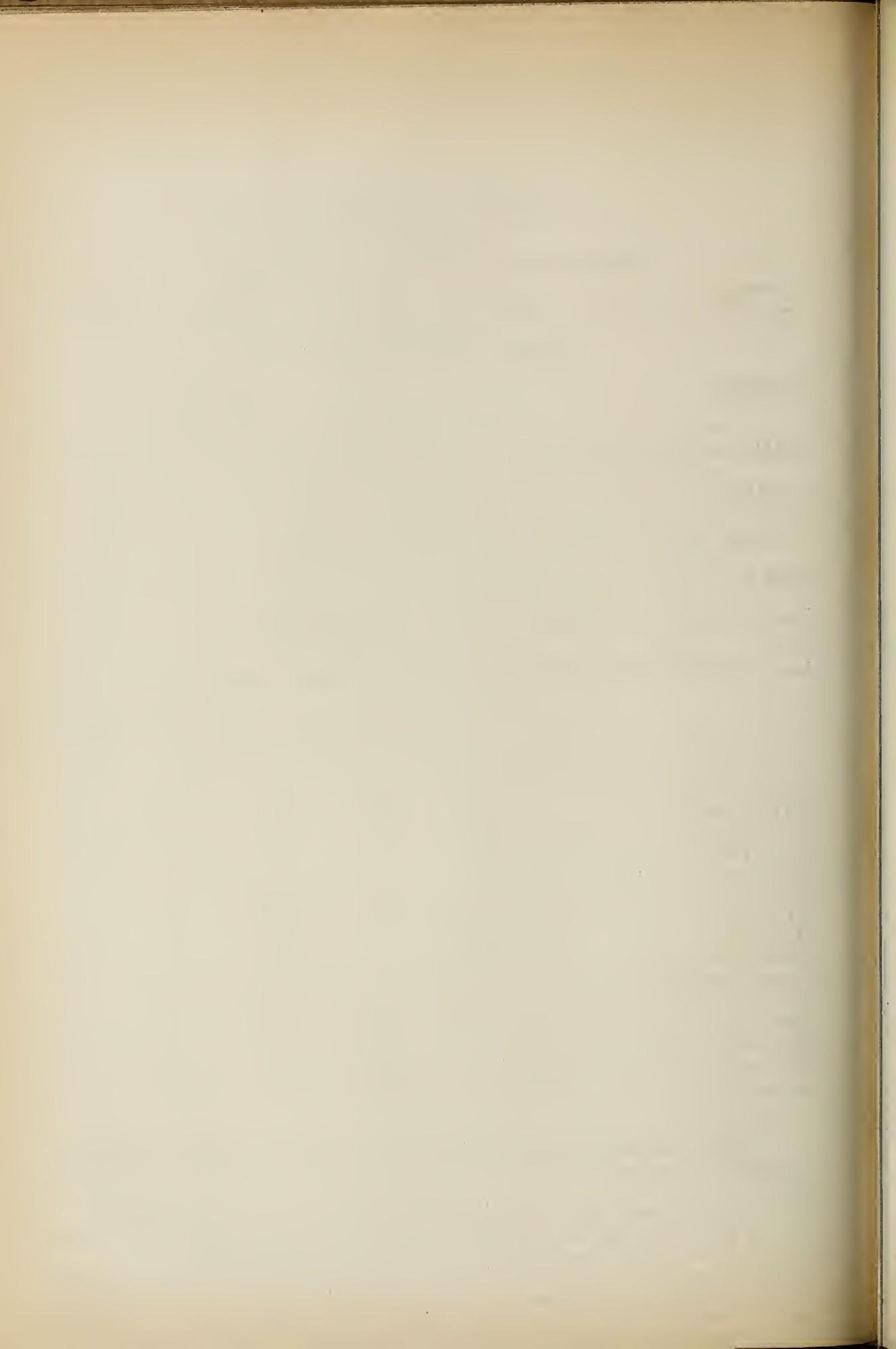
Record of Hog Feeding Experiments from May 7 to August 20, 1924.

	Pasture lots		Hay lots	
	Barley	Barley & milk	Barley	Barley & milk
Number of days fed	105	:	105	:
Initial weight	Pounds	220	221	246
Final weight	do	572	506	559
Gain, total	do	552	285	293
Daily gain per head	do	.67	.54	.56
Daily gain, per cent .....		.91	.79	.75
Barley fed	Pounds	797	372	738
Milk fed	Gallons	0	217	0
Value of barley @ \$15.94	\$15.94	:	\$7.14	:\$14.76
Value of milk @ 1¢	0	:	2.17	0
Value of alfalfa @ \$10.00	6.25	:	6.25	6.25
Total cost		22.19	15.86	21.01
Cost per 100 pounds gain	6.30	:	5.56	7.17
Total cost, milk cost deducted	22.19	:	13.69	21.01
		:	:	:

Last year the pigs on alfalfa pasture made more rapid and cheaper gains than those on alfalfa hay. Such was the case in this year's experiment.

It was found that 217 gallons of buttermilk fed to the pasture lot reduced the amount of the barley 273 pounds, or making the feeding value of 1 pound of barley equivalent to 6.8 pounds of buttermilk.

In the case of the hay lot 289 pounds of barley were saved, making 1 pound of barley equivalent in feeding value to 5.8 pounds of buttermilk. For the two lots the average feeding value of 1 pound of barley was equiv-



September 20, 1924.

Newlands (continued)

alent to 6.3 pounds of buttermilk. Figuring barley at 2 cents a pound, the buttermilk would have a value of 31.7 cents per 100 pounds.

The results of this experiment are in accord with the results of former years. The value of skim-milk when fed to pigs generally exceeds the 25 cents per 100 pounds allowed by many dairymen. The actual value of skim-milk is determined by the value of barley. From this experiment when barley is worth:

\$1.00 per cwt.	milk is worth 16¢ per cwt.
1.50 "	24¢ "
1.75 "	28¢ "
2.00 "	32¢ "
2.25 "	36¢ "
2.50 "	40¢ "
2.75 "	44¢ "
3.00 "	48¢ "

E. W. Knight.

San Antonio

The following meteorological data were recorded during the week ending September 20: Temperatures, maximum 98, minimum 67, greatest daily range 25; precipitation .03 inch; sky, 5 days clear, 2 days partly cloudy.

The first picking of all station cotton was completed during the week. The yield of seed cotton per acre from the rotation plats will be considerably below normal. A summary of the first picking from these plats is as follows: Maximum 498 pounds (B6-9); minimum 82 pounds (A4-2); average of 30 plats, 242 pounds. At this time it is doubtful whether a second picking will be justified.

Manuring and plowing rotation plats consumed the major portion of farm labor not engaged in cotton picking.

Geo. T. Ratliffe.

Demonstrations on Reclamation Projects.Belle Fourche

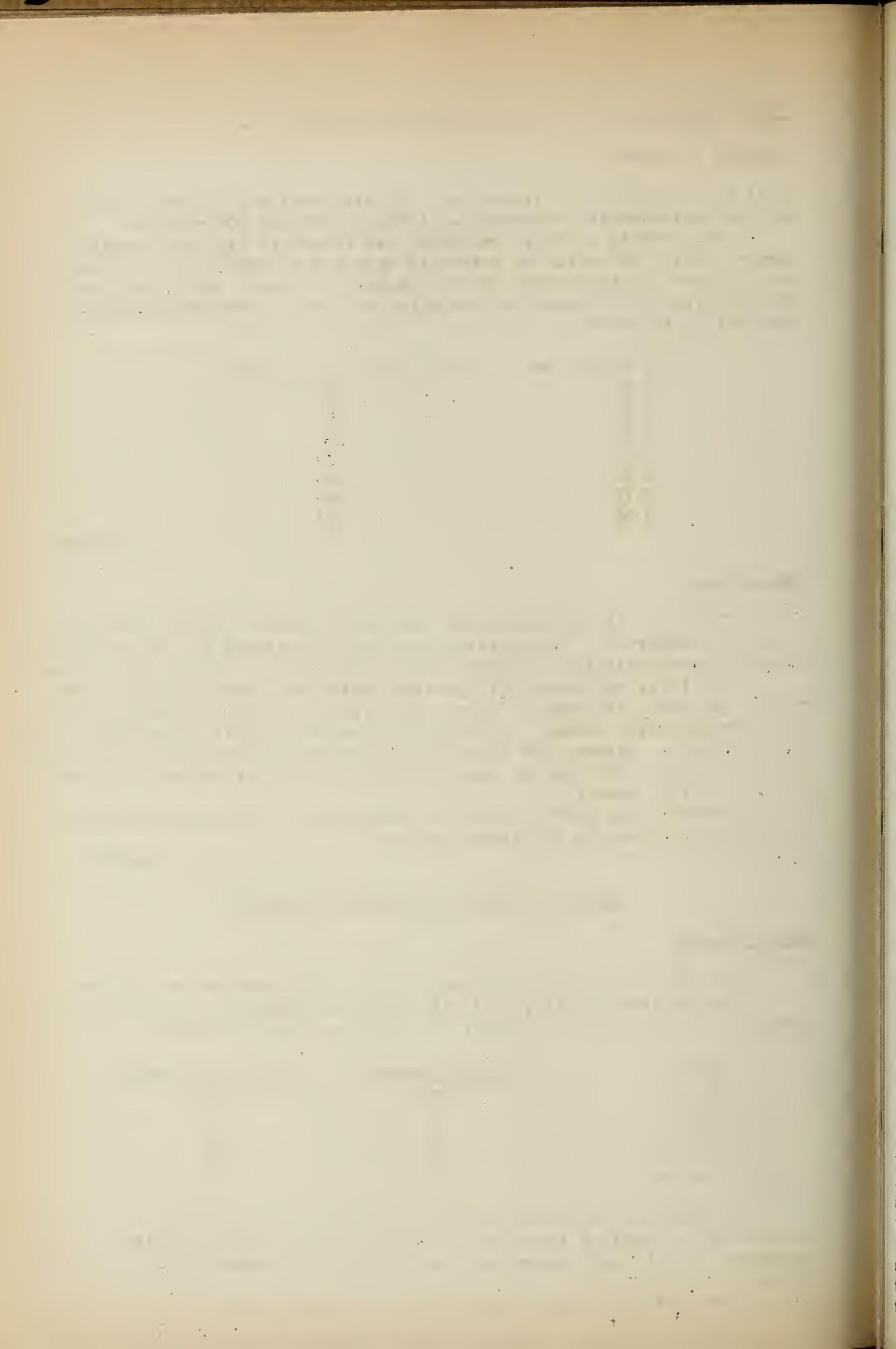
For the week ending September 20 Mr. Miller reports as follows:

The railroad agent reports the following number of cars of stock shipped from Newell for the month of August and up to September 20:

Stock	Month of August		Month of September	
	cars		cars	
Hogs	5		9	
Cattle	25		39	
Sheep	9		34	
Horses	1		1	

During this time bank deposits have increased 13 per cent. One bank reports 40 per cent of their total deposits held as cash. Business men and merchants are all very optimistic over the greatly improved financial situation.

Superintendent Beyer Aune of the Experiment Station held a Hampshire



Belle Fourche (continued)

ram sale on Saturday. The rams averaged \$26 per head and those subject to registration brought from \$28 to \$38 per head.

During the week milk samples were gathered and tested from five dairy herds. Livestock exhibits and purchases arriving from the State Fair were delivered. Parts of two days were used to rehearse the dairy teams that are to go to Milwaukee.

Butterfat is worth 31¢, No. 1 eggs 32¢, and ungraded and No. 2 eggs 27¢.

Frank E. Miller.

Minidoka

The event of largest interest for the week ending September 20 was the annual Cassia County Fair held at Burley. Farmers from all parts of the project carried in exhibits of rather less than usual merit. The livestock exhibit was good, particularly the sheep and dairy cattle. Some local tenders came in to contest with the animals in the project herd, which was organized at the beginning of the season, and succeeded in carrying away one first place, the rest of the project herd winning all firsts and seconds.

The exhibit of Hampshire sheep was particularly gratifying. Rams and ewes, and especially lambs, of more than usual excellence were shown. Some competent sheep judges pronounced J. B. Redford's rams good enough to show anywhere. The sheep exhibit was a true reflection of the interest in sheep husbandry on the project.

A farm price for hay will be settled soon. It is the belief of the agriculturist that the field price will be \$10. Range sheepmen who bring their ewe bands to the project for early lambing will take practically all the surplus hay. These early lambs have brought such good prices in the last few years that men who have lambed later elsewhere are investigating the opportunities for wintering on the project this year, and we will doubtless have with us ten to fifteen thousand ewes belonging to men who have formerly lambed in higher altitudes and later in the season.

Farm prices for grain and hogs remain steady. Bean harvesting is progressing nicely. Potatoes will be a lighter crop than usual and beets possibly 30 or 40 per cent of a normal crop.

John T. Montgomery.

Newlands

Late in the week ending September 20 the first frost of this fall occurred in a few favorable spots on the project; and there have been some reports of ice from different places on the project. The damage to growing crops, however, has been very slight, with the exception of the vine crops, and in these cases the melons and cucumbers have been practically all harvested. The first appearance of frost was about on our average date for first frosts. The crops, however, are more mature this year than is generally the case.

Sales of alfalfa hay continue to be good. About 8,000 tons were sold to feeders at prices ranging from \$13 to \$15 a ton. There remains to be sold in this project approximately 15,000 tons. It is anticipated that this hay will be disposed of before the winter is over.

— 8 —

— 9 —

and the more we are separated from our
natural state, the more we are exposed to
the influence of external objects, and the
more we are liable to error.

It is evident, therefore, that the best way
to attain to a knowledge of truth is to return

to the simple and natural state of mind,
and to let the mind rest in its natural state.

It is also evident that the best way to
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Newlands (continued)

Considerable time was devoted during the week to farm visits in connection with sterility troubles, botulinus infection in poultry, and a case of cattle ear tick. Because of the absence of anyone to treat sterility cases in cattle, considerable attention has been given to this subject and with very satisfactory results. A good many cases of catarrhal trouble of the womb, resulting in sterility, have been successfully handled, and the cow saved to the herd. One of the most discouraging features of dairying is the shy breeding of the cows. Much good has been accomplished along this line for local dairymen through the efforts of this office.

Botulism has caused losses among poultry in a number of instances this fall. Several calls to poultry ranches have been made in this connection. To the uninitiated botulism or limber neck is a very mysterious disease and the disastrous effects are very disheartening. In practically all cases so far found the trouble can be easily traced to some putrid food, such as decayed vegetables, milk products, or animal carcasses. This office has recommended that all the unaffected poultry be corralled at once and a thorough search made of the premises for any decaying material that might be picked up by the chickens. Medication seemed to be of little value in the case of the affected fowls.

The first occurrence of cattle ear tick was observed on one of the large dairy farms during the week. Infestation was almost universal on all the animals of the ranch. Calves, cattle, dogs, and cats were all infested. Infestation in the young calves seemed to be the greatest and caused the most trouble. Some of the calves died before the real trouble was discovered. The presence of the ticks caused the membranes of the ear to swell and the ears to be filled with an exudate. The calves became listless and dejected. When the ticks were removed from the ears, the calves would invariably take on new life. A preparation of one part of pine tar and two parts of light lubricating oil was applied to the inside of the ears in the hope that this would kill the ticks and keep them away for a considerable period. This remedy will be given further attention to note the effect of treatment.

During the week two articles were prepared for the local papers on the subjects of "Advertising for Hay Market," and "Herd Record Work of the Newland's Project Herd Testing Association."

L. E. Cline.

Shoshone

The week ending September 13 has been favorable for all kinds of field work. Light frosts occurred on two mornings, but were not heavy enough to seriously injure crops. Potatoes are being dug and beans are being harvested. One silo was filled, probably the only one that will be filled on the Project this year.

I spent the greater part of two days at the Big Horn County Fair and judged the livestock and poultry. The livestock exhibits were light, but the agricultural exhibits were excellent.

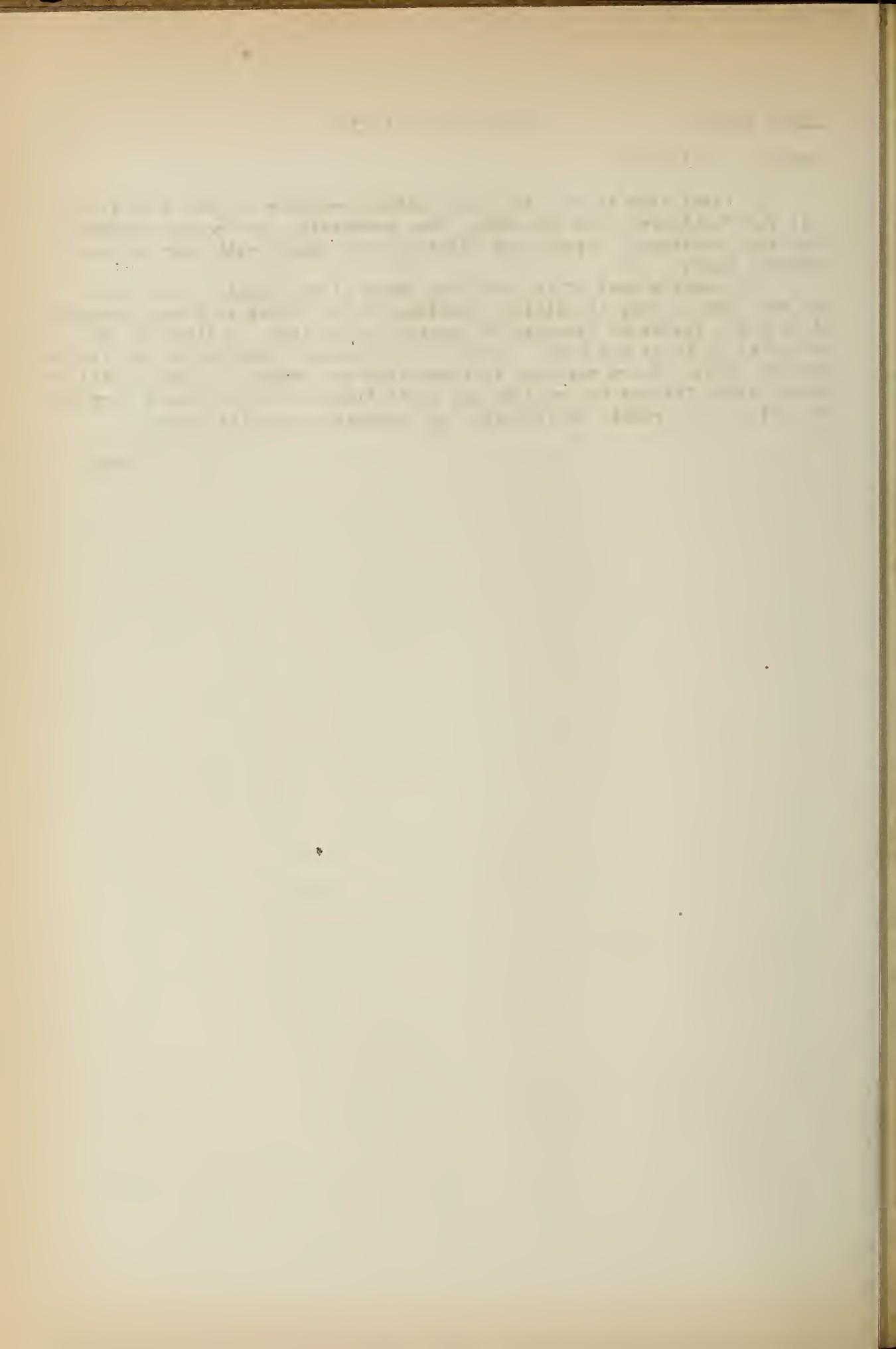
I have helped to get an exhibit ready for the State Fair at Douglas. The exhibit is especially strong in forage and feed crops, and an effort is being made to emphasize the importance and possibilities of livestock production.

Shoshone (continued)

The first four days of the week ending September 20 have been favorable for field work, and threshing, bean harvesting, and potato digging have been continued. Friday and Saturday were cloudy with rain and snow Saturday night.

The greater part of the week was spent at the Wyoming State Fair and the Midland Fair at Billings, Montana, in an effort to become acquainted with the livestock breeders of Wyoming and Montana. A flock of ewes priced at \$4.10 at Red Lodge, Montana, were located, and two of the Project farmers wanting sheep were put in touch with the owner. We have a list of twenty other farmers who want to buy small flocks of sheep, but a part of them will have trouble in financing any expansion even for sheep.

O. J. Grace.



W E E K L Y R E P O R T S
Of the Offices of
WESTERN IRRIGATION AGRICULTURE
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Vol. XXV.

September 27, 1924.

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Western Irrigation Agriculture

Huntley

The maximum temperature for the week ending September 27 was 85, minimum 28, and precipitation trace.

The first killing frost of the season was recorded on September 26, when the minimum temperature was 28. While the frost-free period was about average, corn was not fully matured by this date due to the effect of temperatures below normal during most of the growing season.

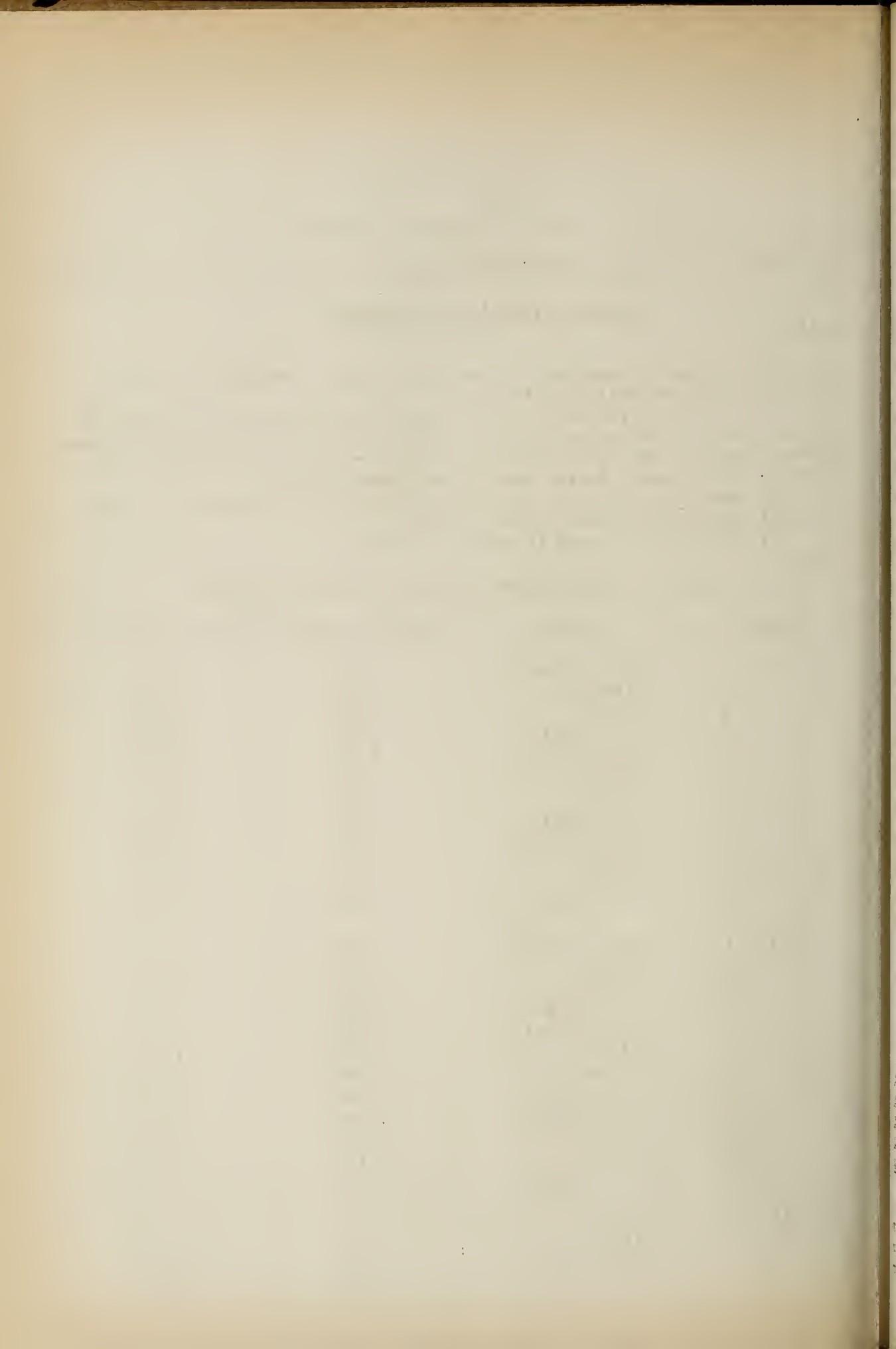
The harvest of silage corn was completed and the harvest of sugar beets and alfalfa was begun during the week.

Yields of silage corn in variety tests are given in the following tables:

Yields of silage corn, Fields L-I and L-II, 1924.

Number	Variety	Yield	
		Pounds per plat	Tons per acre
L- I- 1	Payne's Dent	6,630	13.26
- 2	Mitchell	8,340	16.68
- 3	Calico	6,950	13.90
- 4	N. W. Dent	5,290	10.58
- 5	Payne's Dent	7,540	15.08
- 6	Mitchell	8,060	16.12
- 7	Calico	8,500	17.00
- 8	N. W. Dent	6,930	13.86
- 9	Payne's Dent	7,340	14.68
- 10	Mitchell	7,940	15.88
- 11	Calico	8,780	17.56
- 12	N. W. Dent	6,760	13.52
	:	:	:
L- II- 1	Payne's Dent	5,750	11.50
- 2	Mitchell	5,810	11.62
- 3	Calico	6,150	12.30
- 4	N. W. Dent	4,780	9.56
- 5	Payne's Dent	5,780	11.56
- 6	Mitchell	6,460	12.92
- 7	Calico	7,230	14.46
- 8	N. W. Dent	5,940	11.88
- 9	Payne's Dent	6,770	13.54
- 10	Mitchell	7,190	14.38
- 11	Calico	7,100	14.20
- 12	N. W. Dent	6,240	12.48
Average	:	:	:
3 plats, L-I	Mitchell	8,113	16.23
	Calico	8,077	16.15
	Payne's Dent	7,170	14.34
	N. W. Dent	6,327	12.65

(Table continued on next page)



Huntley (continued)

(Table continued from preceding page)

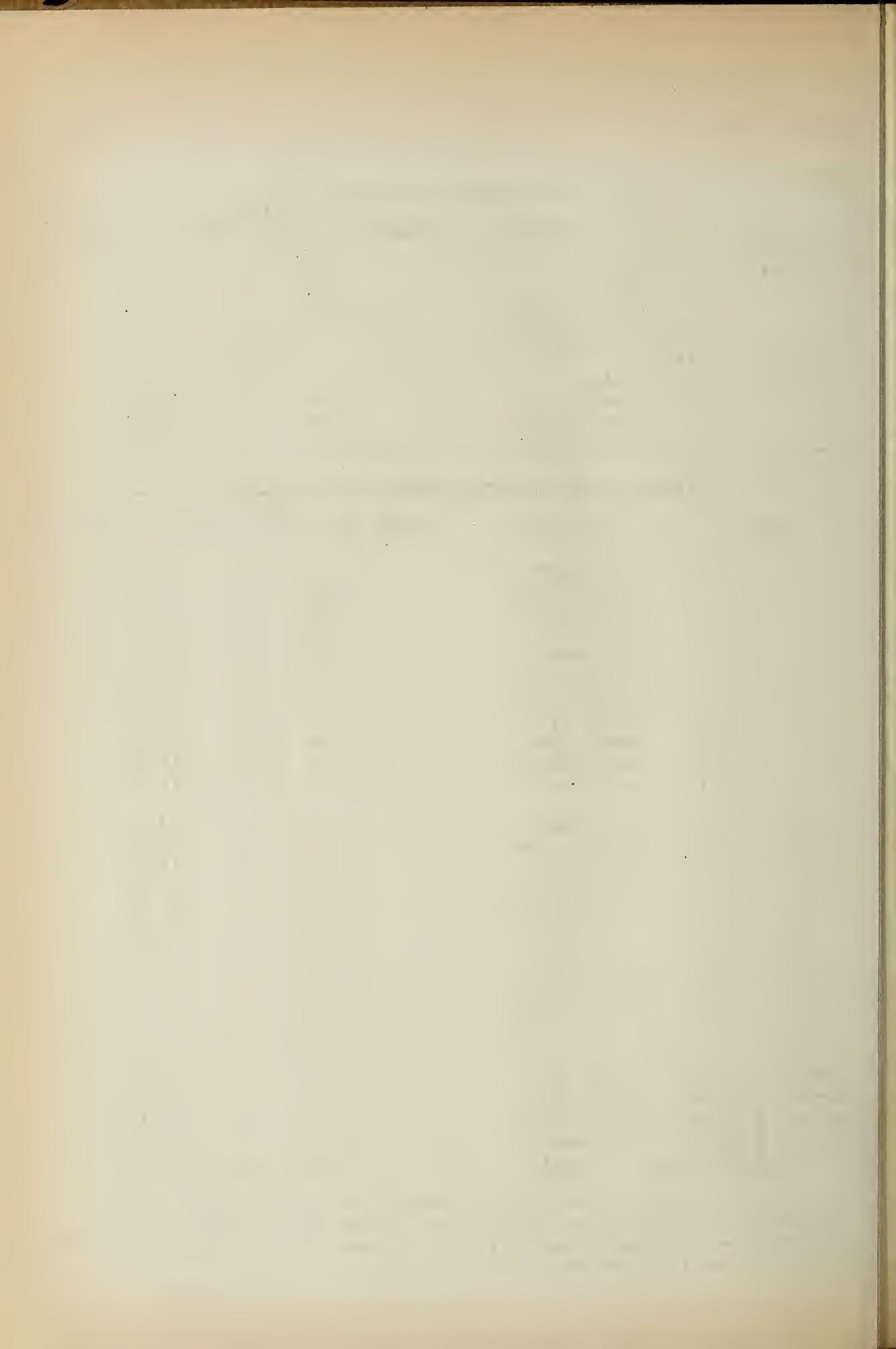
			Yield	
Number	Variety	Pounds per plat	Tons per acre	
Average	:	:	:	
3 plats, L-II	: Calico	: 6,827	: 13.65	
	: Mitchell	: 6,487	: 12.97	
	: Payne's Dent	: 6,100	: 12.20	
	: N. W. Dent	: 5,653	: 11.31	
Average, 6 plats:	:	:	:	
L-I & L-II	: Calico	: 7,452	: 14.90	
	: Mitchell	: 7,300	: 14.60	
	: Payne's Dent	: 6,635	: 13.27	
	: N. W. Dent	: 5,990	: 11.96	

Yields of silage corn, Fields O-III and O-IV

			Yield	
Number	Variety	Pounds per Plat	Tons per Acre	
O-III- 1	: N. W. Dent	: 5,820	: 11.64	
- 2	: Payne's Dent	: 7,210	: 14.42	
- 3	: Silver King	: 7,720	: 15.44	
- 4	: Golden Glow	: 9,810	: 19.62	
- 5	: Minnesota #13	: 6,550	: 13.10	
- 6	: N. W. Dent	: 7,090	: 14.18	
- 7	: Payne's Dent	: 6,960	: 13.92	
- 8	: Silver King	: 7,800	: 15.60	
- 9	: Golden Glow	: 8,340	: 16.68	
- 10	: Minnesota #13	: 7,060	: 14.12	
- 11	: N. W. Dent	: 6,280	: 12.56	
O-IV- - 1	: N. W. Dent	: 6,910	: 13.82	
- 2	: Payne's Dent	: 7,700	: 15.40	
- 3	: Silver King	: 8,120	: 16.24	
- 4	: Golden Glow	: 8,650	: 17.30	
- 5	: Minnesota #13	: 7,110	: 14.22	
- 6	: N. W. Dent	: 7,290	: 14.58	
- 7	: Payne's Dent	: 8,390	: 16.78	
- 8	: Silver King	: 9,550	: 19.10	
- 9	: Golden Glow	: 8,400	: 16.80	
- 10	: Minnesota #13	: 7,640	: 15.28	
- 11	: N. W. Dent	: 7,310	: 14.62	
Average, 4 plats	: Golden Glow	: 8,800	: 17.60	
Average, 4 plats	: Silver King	: 8,298	: 16.60	
Average, 4 plats	: Payne's Dent	: 7,565	: 15.13	
Average, 4 plats	: Minnesota #13	: 7,090	: 14.18	
Average, 6 plats	: N. W. Dent	: 6,783	: 13.57	

Of the varieties listed, only Northwestern Dent and Payne's Dent were matured sufficiently for making silage of the best quality. These varieties were well denting and beginning to harden. The remaining varieties were in the roasting-ear stage.

Dan Hansen.



Newlands

The following meteorological data were recorded at this station during the week ending September 27: Mean maximum 76.1, maximum 83 on the 23rd; mean minimum 31.6, minimum 24 on the 26th. There was no rainfall.

The work at the station has consisted of shocking corn, cutting the third crop of alfalfa, and harvesting the field pumpkins. There has been one irrigation. The plats irrigated were C-2, 3, 4, 5; D-1, 4, 5, 8; E-1 to 8 inclusive; and F-4, 5, 6, 9, 11, 16.

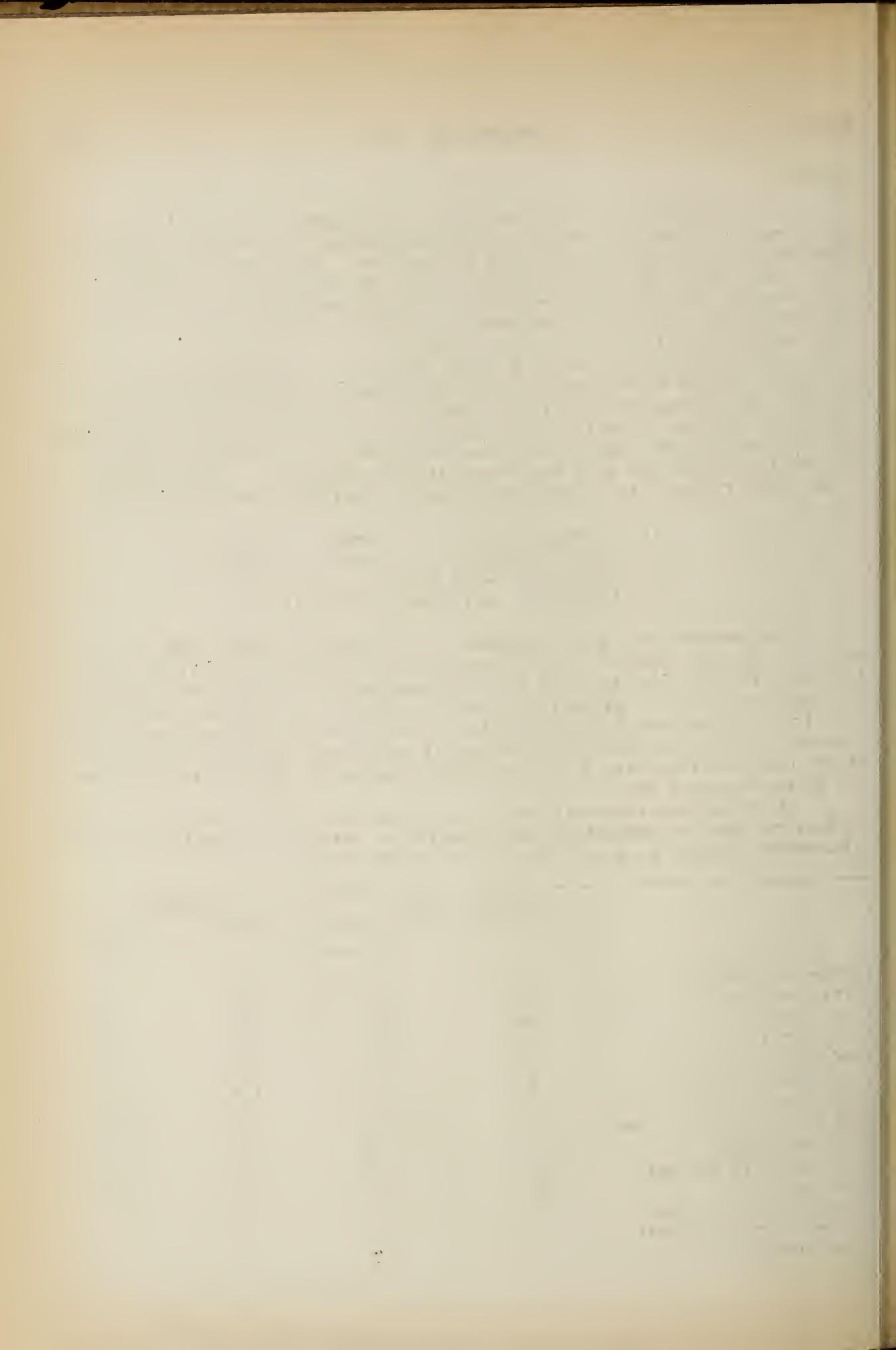
On August 8, when the pigs in the hog-feeding experiments had reached an average weight of 105 pounds, they were placed on self-feeders which provided them automatically with all the barley they could eat. They were allowed to continue with the rough forage, i.e. alfalfa hay or pasture, but it was noted that the amount eaten was negligible. The feeding of milk to the two lots which had been receiving milk was continued. Before putting on the self-feeders, the feed rations for the four lots were as follows:

- I. Alfalfa pasture + 2% barley
- II. Alfalfa pasture + 1% barley + 5% milk
- III. Alfalfa hay + 2% barley
- IV. Alfalfa hay + 1% barley + 5% milk.

The accompanying table summarizes the results obtained while the pigs were on self-feeders. It is interesting to note that so little advantage was obtained from the milk that the increased gains therefrom did not even pay one cent per gallon for the milk consumed. The average weight of the pigs when sold was 183 pounds a head, and the price received was 8 cents a pound. The average cost a hundredweight gained when the milk was charged at one cent a gallon was \$7.55, and \$7.33 a hundredweight when the milk was not charged against them.

The results corroborate previous experiments with pigs on self-feeders in that the cost of production about equals the returns when barley is \$2.00 a hundredweight and hogs sell for \$8.00 a hundredweight.

	Pasture lots		Hay lots	
	Barley	Barley and milk	Barley	Barley and milk
	:	:	:	:
Number of days fed	35	35	35	35
Initial weight lbs:	572	506	539	489
Final weight " :	979	910	903	868
Gain, total " :	407	404	364	379
Gain, daily per head " :	2.3	2.3	2.1	2.2
Gain, daily % :	1.55	1.69	1.49	1.65
Barley fed lbs.:	1,423	1,366	1,432	1,456
Milk fed cwt.:	----	13.72	----	13.31
Value barley @2¢ \$:	28.46	27.32	28.64	29.12
Value milk @1¢ per gal. " :	----	2.00	----	1.55
Total cost " :	28.46	29.32	28.64	30.67
Cost per 100 lbs. gain " :	6.99	7.26	7.87	8.09
Cost per cwt.(milk cost not included) " :	6.99	6.76	7.87	7.68
	:	:	:	:



Scottsbluff:

The average maximum temperature for the two-weeks period ending September 27 was 69, with a maximum of 85 on the 23rd; the average minimum was 41, with a minimum of 32 on the 27th. There have been two light frosts—one on the morning of the 22nd and the other on the morning of the 27th. The last one came just after a rain, and neither frost did any injury to garden or field crops at the Station. During this period there have been 1.66 inches of rainfall, making a total of 2.98 inches for the month, as compared with a 12-year average of 1.86 inches.

During the first part of the period the grain plots in field K were plowed, the plots in rotations 21, 23, 25, 31, and 61 being first manured. Some time was spent in preparing exhibits for the County Fair held September 17-20. The same exhibit was taken to the Morrill County Fair held at Bridgeport the following week.

During the last half of the period winter wheat in rotation 5 and the rye in rotation 27 were seeded. Corn harvesting was resumed and the silos filled.

About half of the hogs on pasture test were shipped the latter part of the week.

The sugar factories in the Valley have begun operations and some beasts are being delivered.

Potatoes are moving very slowly and at a low price. The major part of the crop is still in the ground. There seems to be plenty of labor this year. A good many of the growers this year are using machines for picking for the first time. The price offered by local buyers is about 80 cents a hundredweight.

James A. Holden.

Demonstrations on Reclamation Projects.Belle Fourche

On Tuesday of the week ending September 27 the agriculturist, with four club members and a chaperon, left for Brookings and Milwaukee. At Brookings two days were spent in dairy team judging, having the fine college herd of Holsteins, Ayrshires, Jerseys, and Guernseys to practice on. On Friday the party left for the National Dairy Exposition at Milwaukee, the two champion project teams representing the State at the big show.

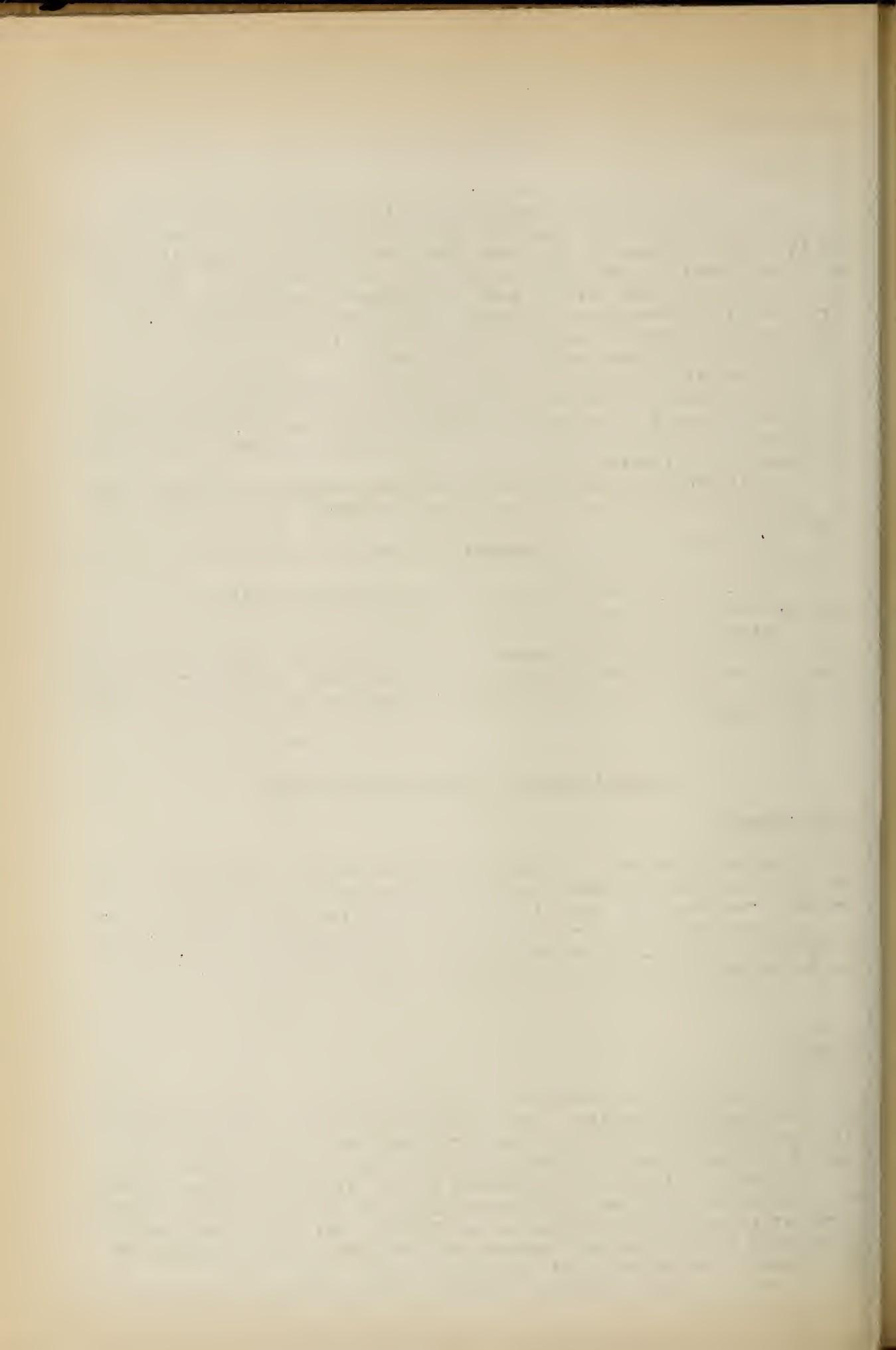
Frank E. Miller.

Flathead

The weeks ending September 13 and 20 were spent in Minnesota, Iowa, and North Dakota on vacation. The agricultural colleges and stations in Minnesota and North Dakota were visited during this time. Bulletins were secured and conferences held with several of the extension people.

I arrived at Helena on September 23 and attended a meeting at which the railroad officials presented their plans for advertising the Pacific Northwest in general and Montana in particular. This was a very interesting meeting and pointed out what Montana and her citizens can do to make the advertising as effective as it should be.

A number of the extension workers of the State were also in attendance.



Flathead (continued)

at the Fair and offered opportunities for discussions and conferences.

The corn exhibit at the State Fair was of good quality and considerable quantity in spite of unfavorable weather conditions for corn this year. The dairy entries were good and represented all dairy breeds.

A meeting was attended at Mt. Ignatius, sponsored by the Polson Kiwanis and called to boost the Lake County Fair and Flathead Project exhibit, which was very successful.

Butterfat dropped at the local station to 34¢ and 36¢, which is two cents below prices at the creamery.

L. B. Miller.

Minidoka

A considerable part of the week ending September 27 was spent in catching up with details that had been neglected during the Fairs.

Ton litters were checked up and only one left in the running. This one has a fair prospect of attaining the goal.

Preparations were made to give a flock of poultry a tuberculin test. These are older birds, yearlings and two-year olds. The reactors will be burned, and the remaining birds quarantined in clean quarters and used for laying stock. The owner wishes to try the birds out for another year because they have been exceptionally high producers. For that reason he hesitates to slaughter all of them.

Minidoka County now has the largest purebred flock of Suffolk sheep in the United States, the property of Storms Brothers near Rupert. They are a fine little flock of fifty ewes. Range-men are looking with considerable favor on the Suffolk cross on ordinary range ewes. The lambs from this cross for the last two years have given a very good account of themselves, outweighing from three to seven pounds a head Hampshire crosses carried on under exactly the same conditions and from ewes of the same quality, and furnishing a very tidy carcass with apparently a larger percentage of high quality meat. Block tests have not yet been made, but it is the purpose of breeders to make such tests.

John T. Montgomery.

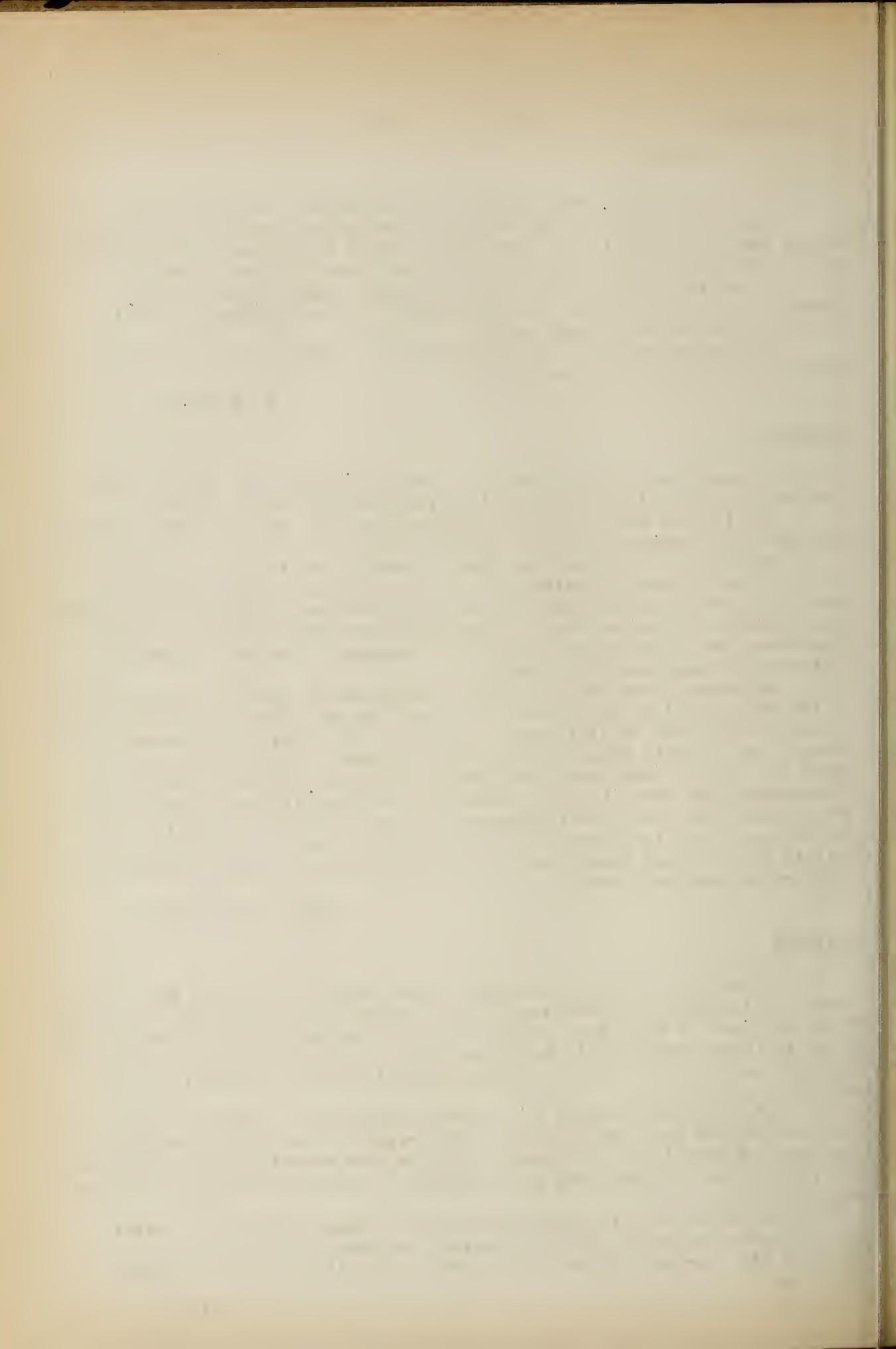
Newlands

It has been necessary to devote considerable time during the week ending September 27 to contagious disease control work. Vaccination against these diseases is taken care of by the State Veterinary Control Service, but there is always considerable local work to do to expedite this service. The fall months seem to be a period of susceptibility for blackleg especially.

A cooperative shipment of hogs was arranged for during the week. A full car of good hogs will be sent. The prices offered f.o.b. Reno are 9½¢ for hogs weighing 150 to 200 pounds, 8½¢ for hogs weighing 200 to 250 pounds, and 7½¢ for hogs weighing 250 to 300 pounds. This load of hogs will go out early next week.

The prices of farm commodities on the Newlands Project are holding up very satisfactorily. Farmers received for wheat last week \$50 a ton, for eggs 41¢, for hay \$13.50 in the stack, for butterfat 38¢, for potatoes \$40 a ton.

L. E. Cline.



North Platte

The Morrill County Fair was held during the week ending September 27. The Experiment Farm had an exhibit on the grounds. I spent one day there, returning to the Experiment Farm with the exhibit on Friday on account of a heavy rain on that day. The Fair was limited to two days. The livestock and agricultural exhibits were much larger than ever before, and had it not been for the rain a very successful Fair would have been staged.

Three herds of hogs were vaccinated near Bayard the first of the week and 250 hogs were handled.

Mr. Cooley visited the Project the latter part of the week. Most of the day Saturday was spent with him.

D. H. Proops.

Shoshone

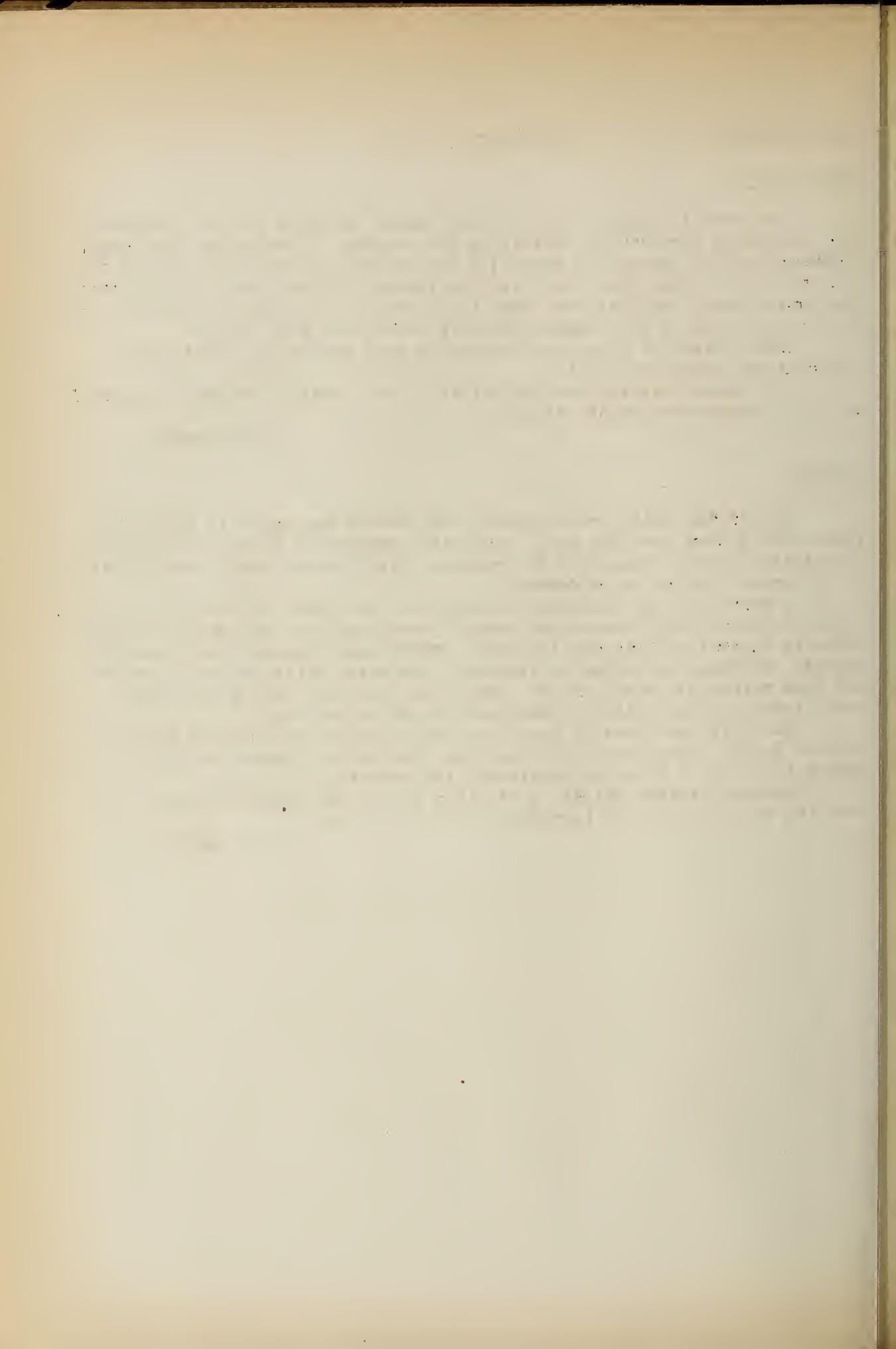
Almost the entire week ending September 27 was spent in trying to locate sheep that were for sale. Some time Sunday and Monday was spent in discussing means of financing the purchase with bankers and a representative of the Great Western Sugar Company.

A trip was made Wednesday to Meetettse and Cody to find ewes for sale. We had requests from farmers, who could get the money to buy them, for over 1000, to be divided into small flocks. Friday and Saturday were spent at Roberts, Montana, inspecting a flock of ewes being delivered there, which had been priced at \$4.10 a head. These were old ewes culled from small farm flocks and had outlived their usefulness as breeders.

The only ewes that we have been able to find that are for sale is a band of 3,000. These are broken-mouthed ewes and are priced at \$6.50. That sounds too high to be a very desirable investment.

Farmers started pulling beets this week. The ground is still wet from the snow and rain of last week.

O. J. Grace.



W E E K L Y R E P O R T S
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Vol. XXV.

October 4, 1924.

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Western Irrigation Agriculture.

Newlands

The meteorological data recorded at this station for the week ending October 4 follows: Mean maximum 76.1, maximum 86 on September 29 and 30; minimum 30 on October 2. There was .05 inch of rain on October 5.

Most of this period has been devoted to harvesting the third crop of hay. Such truck crops as carrots, pumpkins, and cabbages have been gathered and stored for the winter.

E. W. Knight.

San Antonio

The following temperatures were recorded for the two-weeks period ending October 4: Maximum 96, minimum 46, and greatest daily range 34. Eleven days were clear, two were partly cloudy, and one was cloudy. Showers on September 21 and 22 gave a total precipitation of .06 inch.

The second, and last, picking of cotton from the rotation plats, which is made up of a small crop of pinched, top bolls, was started.

Farm operations have included hauling manure to rotation plats; plowing rotation milo plats; plowing corn stubble, D-3; disking fields B-3, C-3, B-4, C-6, and pasture in preparation for fall plantings; seeding oats in the pasture; rebuilding corral fence; grubbing Huisache brush from main public road west of the station; and general weeding and cultivation of rotation plats, orchards, nurseries, and vineyard.

Geo. T. Ratliffe.

Demonstrations on Reclamation Projects.

Belle Fourche

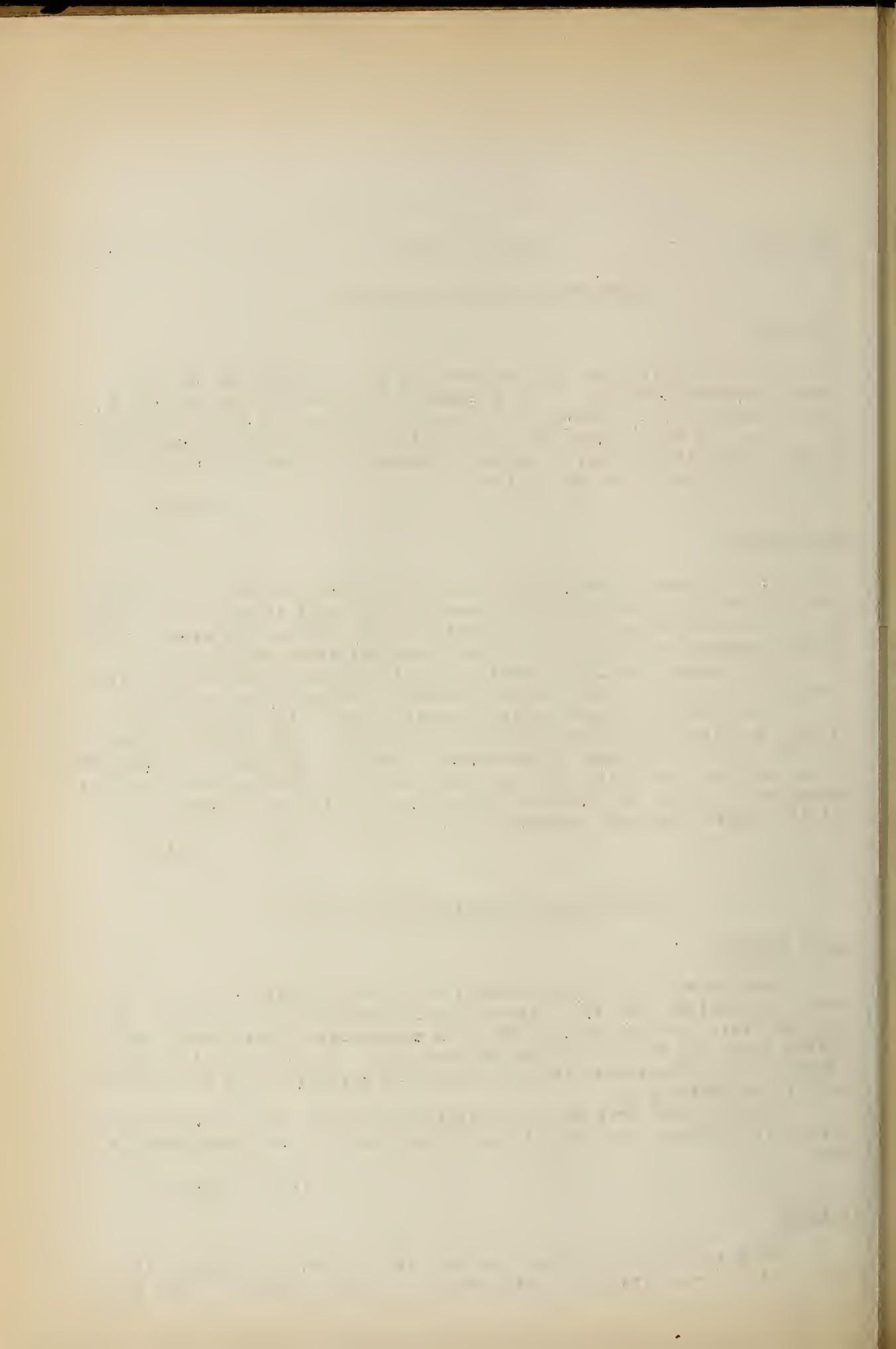
Most of the week ending October 4 was spent at the boys and girls' camp in connection with the National Dairy Exposition at Milwaukee. In the boys and girls' judging contest the team representing South Dakota stood twelfth among the twenty State teams competing. The teams arrived home on Saturday very enthusiastic about dairying and delighted with the trip and the well conducted camp.

On the return trip the agriculturist spent one day at Brookings conferring with specialists on club work, dairy matters, and farm survey records.

Frank E. Miller.

Flathead

Two fairs, one at Missoula and the other a local exhibit at the Moiese Valley, were attended during the week ending October 4. The lack of



Flathead (continued)

good corn this year, due to a cool season and unusually early frosts, was noticeable at all fairs attended. The Moiese Fair was the tenth annual exhibit in the Valley and was well patronized by local exhibitors and visitors. A free barbecue was a feature of the noon hour.

Two turkey demonstrations, dealing with the killing, pickling, and packing, were conducted the last two days of the week by Miss Cushman, poultry specialist from Bozeman. A medium-sized, though interested, crowd was in attendance. It is hoped to give turkeys further attention, as a considerable number of people are interested in them and need assistance in disease control and marketing problems.

Two press articles were prepared; considerable time was used in sending out notices of the poultry demonstrations; plans were made with cow tester for a cow testing association booth at the fair at Polson; and office calls on blackhead, sheep, and pasture, raising certified alfalfa seed, etc. were given attention.

Butterfat is 34¢ and 36¢ at local collecting station. Best spring wheat is up to \$1.25.

L. B. Miller.

Minidoka

Farm sales continue to show a good demand for dairy cows of known production during the week ending October 4. Nondescripts are selling at little more than beef price.

The office received a call from Mr. Paul Nash and Mr. Chester Gray of Missouri, who work with the American Farm Bureau Federation. Having no county agent in the county, these men called at the office for help in arranging some farmers' meeting connected with the Beet Growers' Association. Two or three days' study of farm conditions on the project brought from these men, who are rather careful observers, the statement that Minidoka Project's chances for success were most excellent and compared very favorably with other projects visited. It was the opinion of Mr. Gray that project farmers were not much worse off, if any, than farmers in other sections of the United States which he had visited.

Range sheep men came into the project to buy hay, but few contracts were made. The offers of \$8.00 were rejected.

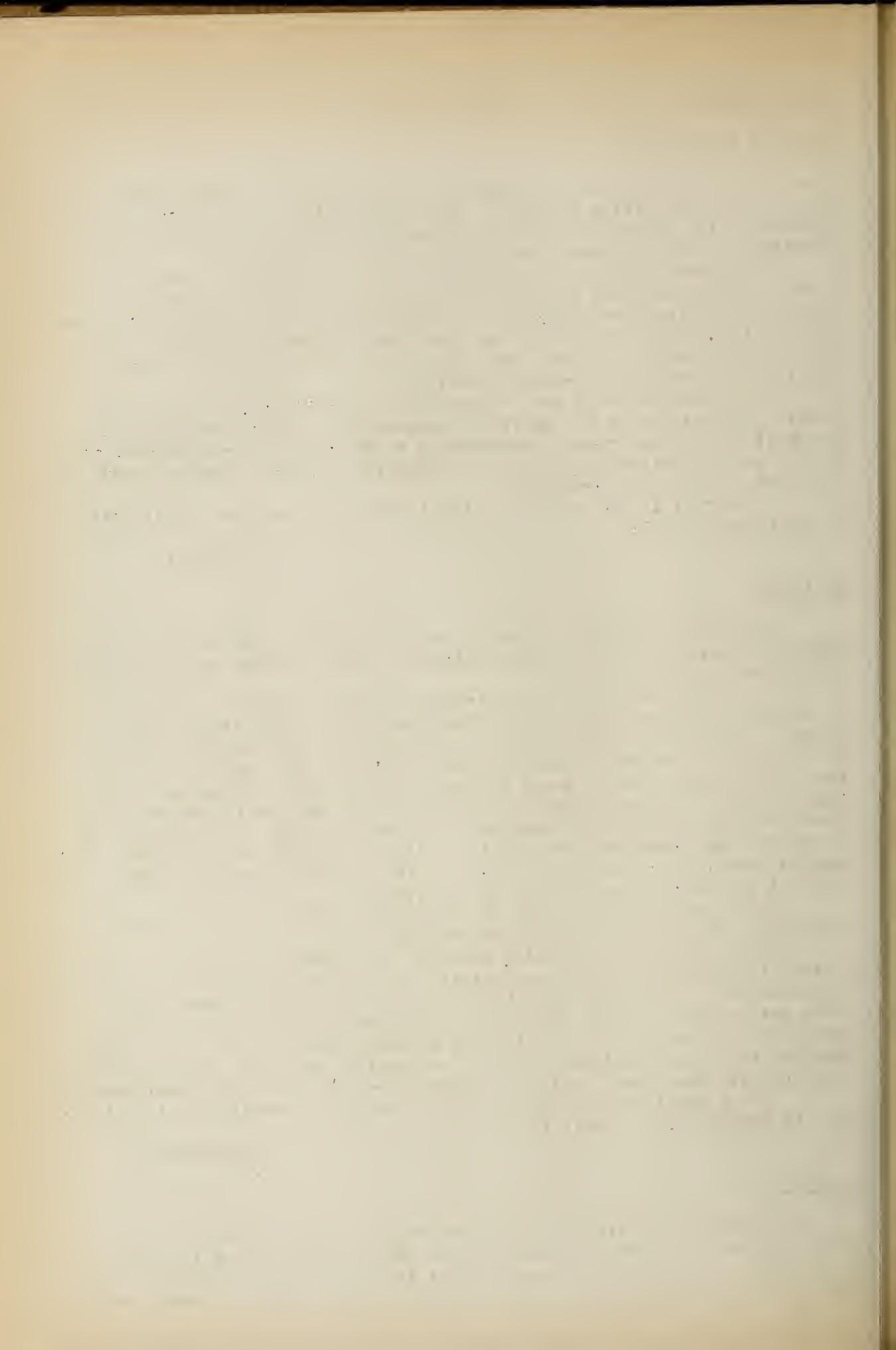
The members of the Poultry Growers' Association met and made arrangements for the local handling and shipping of eggs to the candling station at Pocatello. The plan is to deliver the cases to a local firm, which takes care of the eggs and loads them on the train for five cents a case. This is thought to be a very satisfactory local arrangement. An egg car picks up the shipments twice a week. Association prices to this date have been slightly above local prices and have served to stimulate local prices.

Animal health continues excellent. Two farms reported having blackhead in turkeys with a small loss.

J. T. Montgomery.

Newlands

A cooperative shipment of hogs took up some time during the week ending October 4. Eleven farmers shipped 98 hogs in a cooperative shipment to Reno, Nevada, all of which except five were graded as prime. The price received for prime hogs was 9½ cents in Reno. After deducting ship-



Newlands (Continued)

ving expense and shrinkage, the hogs netted \$8.73 a hundred pounds at Fallon. This price was 73 cents a hundred more than was being paid by local dealers. It is expected that this shipment will result in better prices locally. Another shipment of hogs is being arranged.

During the week one trip was made into the Fernley district to confer with some dairymen on breeding troubles. Dairy herds from the outside continue to come into this project for feeding purposes. A number of them are looking for permanent locations. During the week one dairy herd of ten cows and another of 30 cows came from California. A number of herds are expected by special train next week. Some of these herds are expected to remain here permanently. Special trains of sheep and beef cattle come into the Valley almost daily for the purpose of winter feeding.

Hay is selling for \$13 to \$13.50 net in the stack. The average price for butterfat in September was 41.6 cents a pound.

L. E. Cline.

North Platte

The first part of the week ending October 4 was spent collecting final reports from members of pig and sheep clubs. Assistance was given the Secretary of the County Fair Board in mailing out checks to club members who won prizes at the Fair.

Two days of the week were devoted to culling and castrating demonstrations in the upper part of the project. A few capons were made to be used as brooders next spring, and four culling demonstrations were given. Owners of two of the flocks culled are planning to begin accredited flock work November 1.

Eighty-seven sheep were immunized, all of which were in one herd. The cholera outbreak near Bayard seems to be checked; no cholera has been reported lately anywhere on the project.

D. H. Propps.

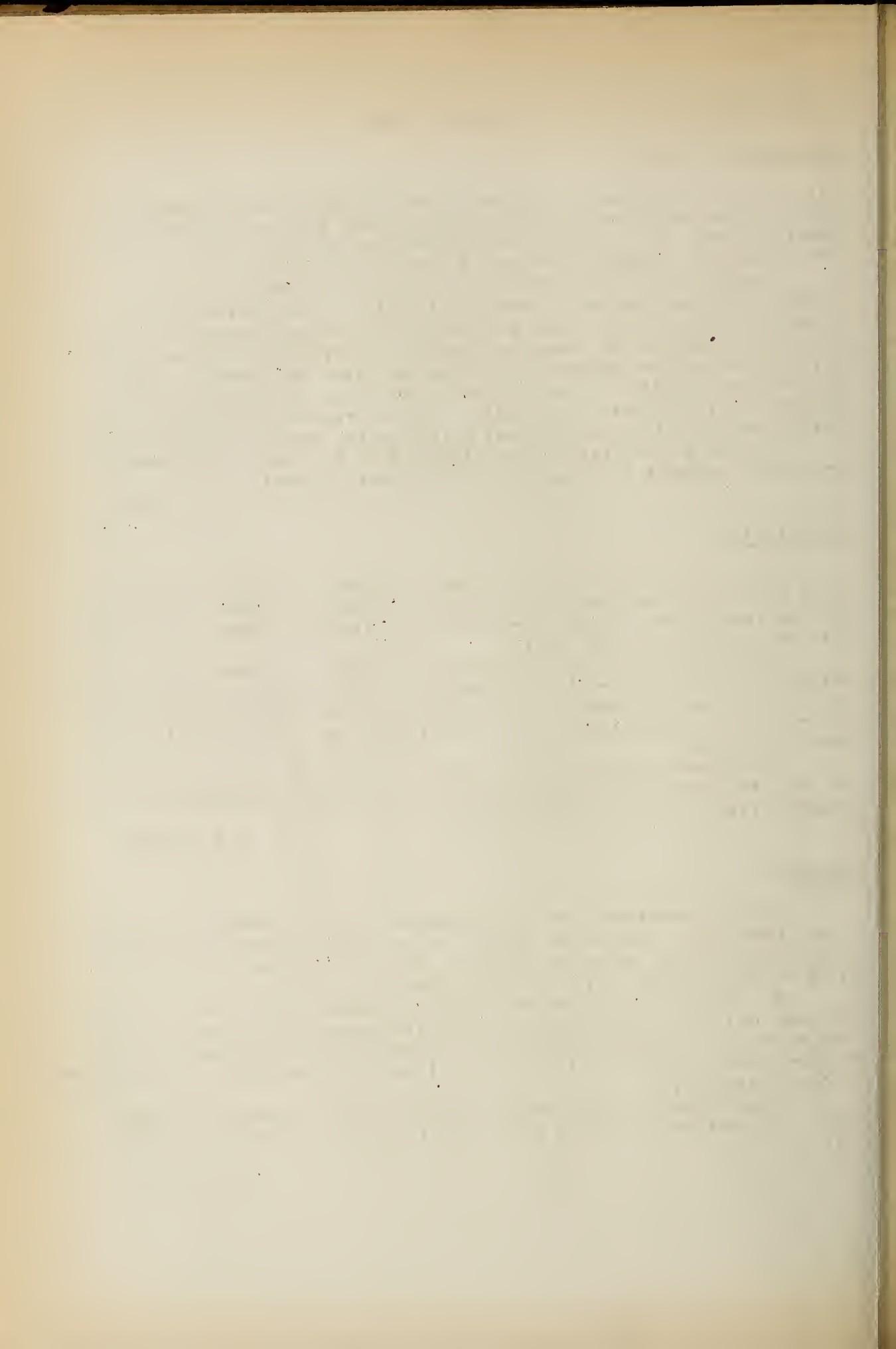
Shoshone

Weather conditions have been favorable for fall work during the week ending October 4. Farmers are pulling beets, digging potatoes, threshing grain, and threshing or stacking beans. The third cutting of alfalfa is light and only a small acreage will be stacked.

The greater part of the week has been spent in trying to find sheep for sale or to be fed on contract. Tentative arrangements have been made with a Billings commission firm to feed 3,000 lambs on contract for three or four months. These are the first that have been placed in this territory by the Billings firm.

A hog buyer is buying stocker pigs at \$6.25 a hundredweight this week. The most of them weigh from 40 to 75 pounds and have been raised on alfalfa.

O. J. Grace.

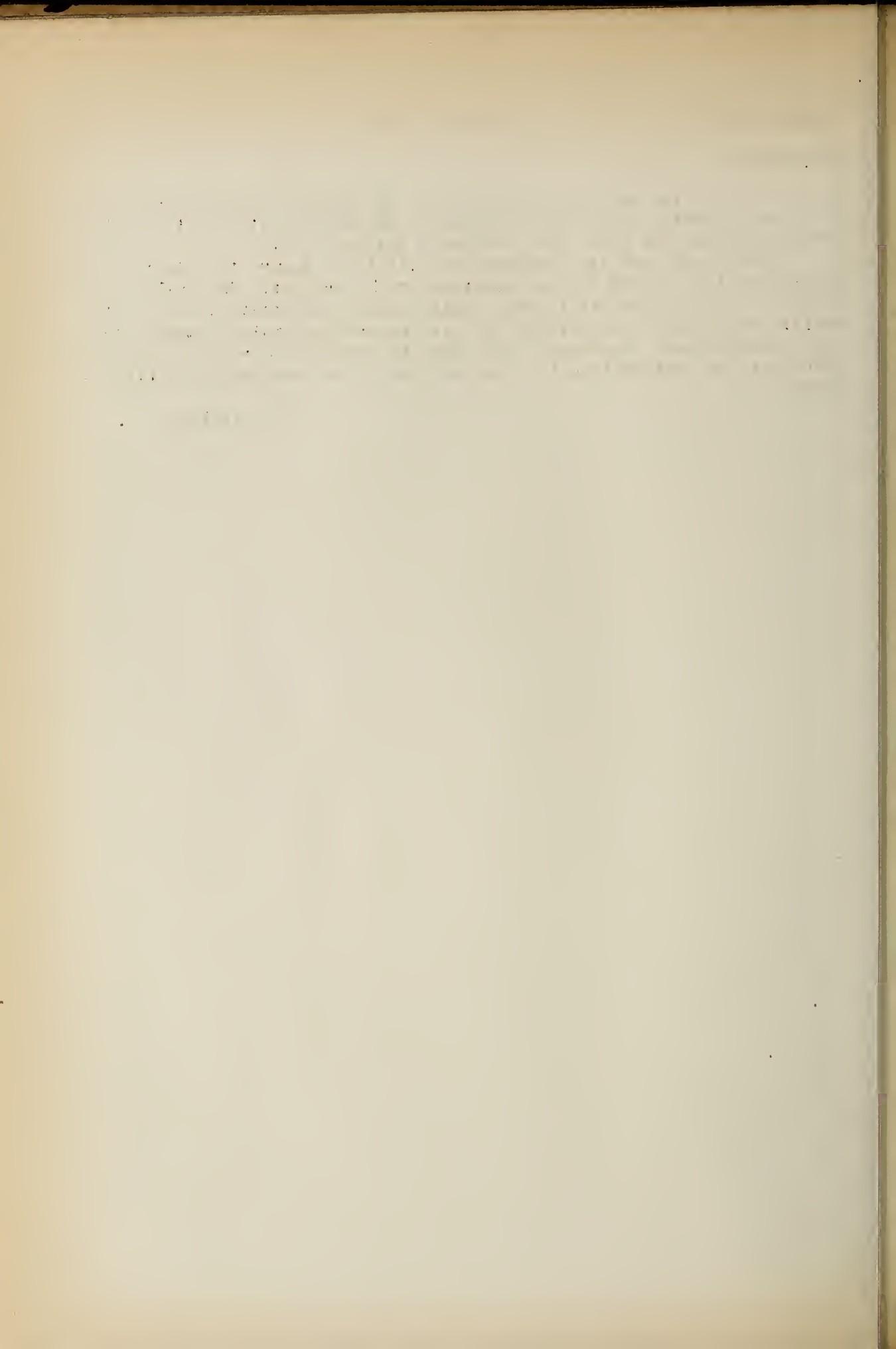


Uncompahgre

Most of the week ending October 4 was spent on annual leave and en route to Montrose. Saturday was spent in the office with County Agent Tucker planning for fall work, receiving callers, etc.

The first work to be undertaken will be to secure ten poultry demonstrators for each of the two counties of the project. They will keep complete records of their flocks, making report each month to the State poultry specialist, who will compile all reports and mail a summary to each demonstrator. Poultrymen will also be interviewed relative to making entries in the International Egg Laying Contest to open in Canon City on November 1.

H. A. Ireland.



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October 11, 1924.

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Western Irrigation Agriculture.

Huntley

The maximum temperature for the week ending October 11 was 72, minimum 25, and precipitation 0.57 inch.

The harvest of sugar beets in this district was delayed by rain which occurred on October 10. Previous to this, harvest conditions have been favorable since the beginning of the harvest. More than 50 per cent of the crop has been delivered at loading stations. Yields will probably be slightly higher than the average of previous seasons, which is about 10 tons an acre.

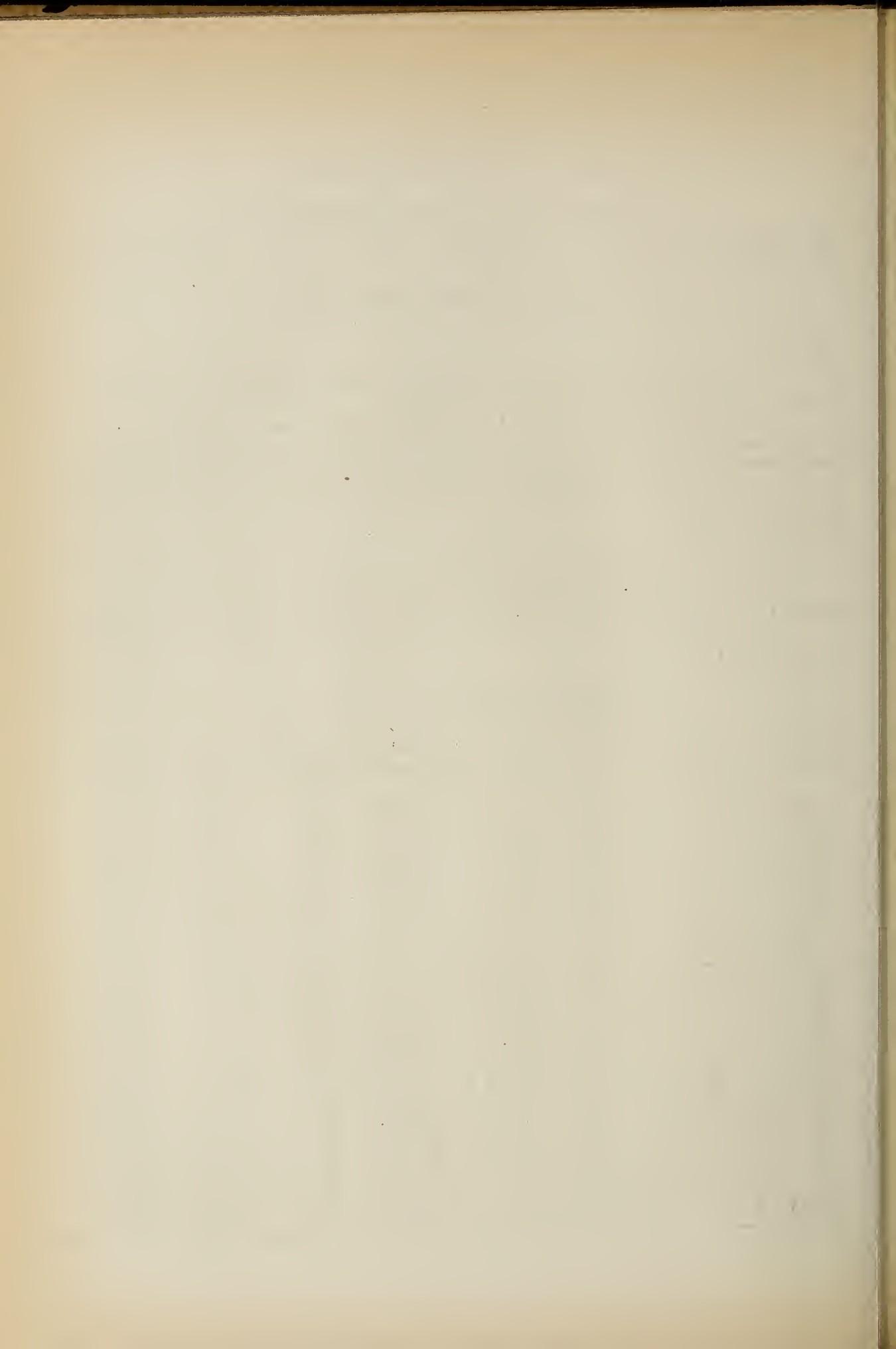
The final bonus payment of \$1.01 a ton for the 1923 beet crop was made recently. The total price for that crop amounted to \$9.01 a ton.

At the experiment station the harvest of beets and potatoes was completed. Yields of these crops are given in the accompanying tables.

Mr. Spencer of the Bureau of Animal Industry visited the station on October 12.

YIELDS OF SUGAR BEETS IN 1924.

Rotation:	Plat	Pounds	Tons	Stand, per acre	Weight, of beets, per acre	% Plants of beets	Weight, Tons	% Sugar
Number:	Number	Plat	acres	per acre	ounces			
2cc	:K- V-22	: 4,857	: 9.71	: 20,608	: 15.1	: 26.0	: 17.30	
18	: - 4	: 3,339	: 6.68	: 15,232	: 14.0	: 38.5	: 15.45	
20	: - 6	: 8,255	: 16.51	: 20,720	: 25.4	: 30.5	: 17.50	
21	: - 14	: 9,953	: 19.91	: 17,808	: 35.7	: 39.5	: 16.10	
22	: - 8	: 4,963	: 9.93	: 18,704	: 17.0	: 35.0	: 16.00	
23	: - 16	: 8,208	: 16.42	: 18,480	: 28.3	: 35.0	: 16.15	
30	:K- IV-17	: 4,770	: 9.54	: 18,256	: 16.6	: 52.5	: 13.95	
31	: III-15	: 7,513	: 15.03	: 21,504	: 22.2	: 29.0	: 16.05	
32	: - IV-20	: 5,521	: 11.04	: 20,332	: 17.0	: 32.5	: 14.70	
40	: - 4	: 8,465	: 16.93	: 20,496	: 26.4	: 46.4	: 14.45	
42	: - 10	: 7,281	: 14.56	: 20,496	: 22.7	: 37.5	: 16.00	
60	:K-III-12	: 7,507	: 15.01	: 17,808	: 27.0	: 39.0	: 18.05	
61	: - 6	: 8,867	: 17.73	: 22,736	: 25.0	: 35.0	: 17.75	
67	: - II- 6	: 8,065	: 16.13	: 20,272	: 25.4	: 34.0	: 16.65	
2cc	:L- IV- 5	: 3,179	: 6.36	: 18,912	: 10.7	: 34.0	: 16.45	
34	: - 2	: 5,909	: 11.82	: 22,560	: 16.6	: 35.5	: 17.10	
35	: - 6	: 9,177	: 18.35	: 21,696	: 27.0	: 30.5	: 18.10	
46	: - 11	: 4,670	: 9.34	: 14,592	: 20.5	: 40.5	: 16.05	
64	: - 18	: 8,156	: 16.31	: 21,216	: 24.5	: 34.0	: 17.75	
Average :		: 6,771	: 13.54	: 19,628	: 21.4	: 36.0	: 16.40	



Huntley (continued)

YIELDS OF POTATOES IN 1924

Rotation number	Plat number	Stand per acre	Pounds per plat	Bushels per acre	Marketable Tubers %
4	K- IV- 21	8,320	1,870	124.7	71.7
20	- V- 5	8,576	2,230	148.7	84.4
21	- 13	8,768	3,460	230.7	82.1
24	- 9	8,576	2,790	186.0	78.5
25	IV- 6	9,152	4,070	271.3	78.9
26	V- 11	8,686	1,947	129.8	71.3
27	- 20	1,584	980	65.3	68.4
30	IV- 15	8,512	2,450	163.3	76.8
31	-III- 13	8,320	2,430	162.0	75.7
40	- IV- 3	8,704	4,190	279.3	81.0
44	- 13	7,808	2,340	156.0	77.4
60	-III- 10	8,768	3,660	244.0	84.5
61	- 4	8,960	4,900	326.7	89.4
4a	L- IV- 9	7,956	2,690	179.3	76.9
34	- 3	8,164	4,220	281.3	91.3
35	- 7	8,112	5,640	376.0	99.8
64	- 19	7,540	3,470	231.3	90.8
Average		8,030	3,137	209.2	81.1

YIELDS OF SUGAR BEETS IN TIME-OF-SEEDING TEST, FIELD O-II, 1924.

Plat No.	Seeding date	Yield Plat, lbs.	Yield Acre, tons	Stand plants per acre	Sugar content %
O-II- 6	5-20-24	7,538	15.076	21,216	14.5
- 7	5-20-24	7,582	15.164	20,160	15.3
- 8	4-22-24	9,686	19.372	23,808	17.2
- 9	12-27-23	9,101	18.202	16,982	16.6
-10	4-22-24	9,863	19.726	22,272	17.6
-11	12-27-23	9,098	18.196	16,512	16.6
Avg. 2 plats	5-20-24		15.120	20,688	14.9
Avg. 2 plats	4-22-24		19.549	23,040	17.4
Avg. 2 plats	12-27-23		18.199	16,747	16.6

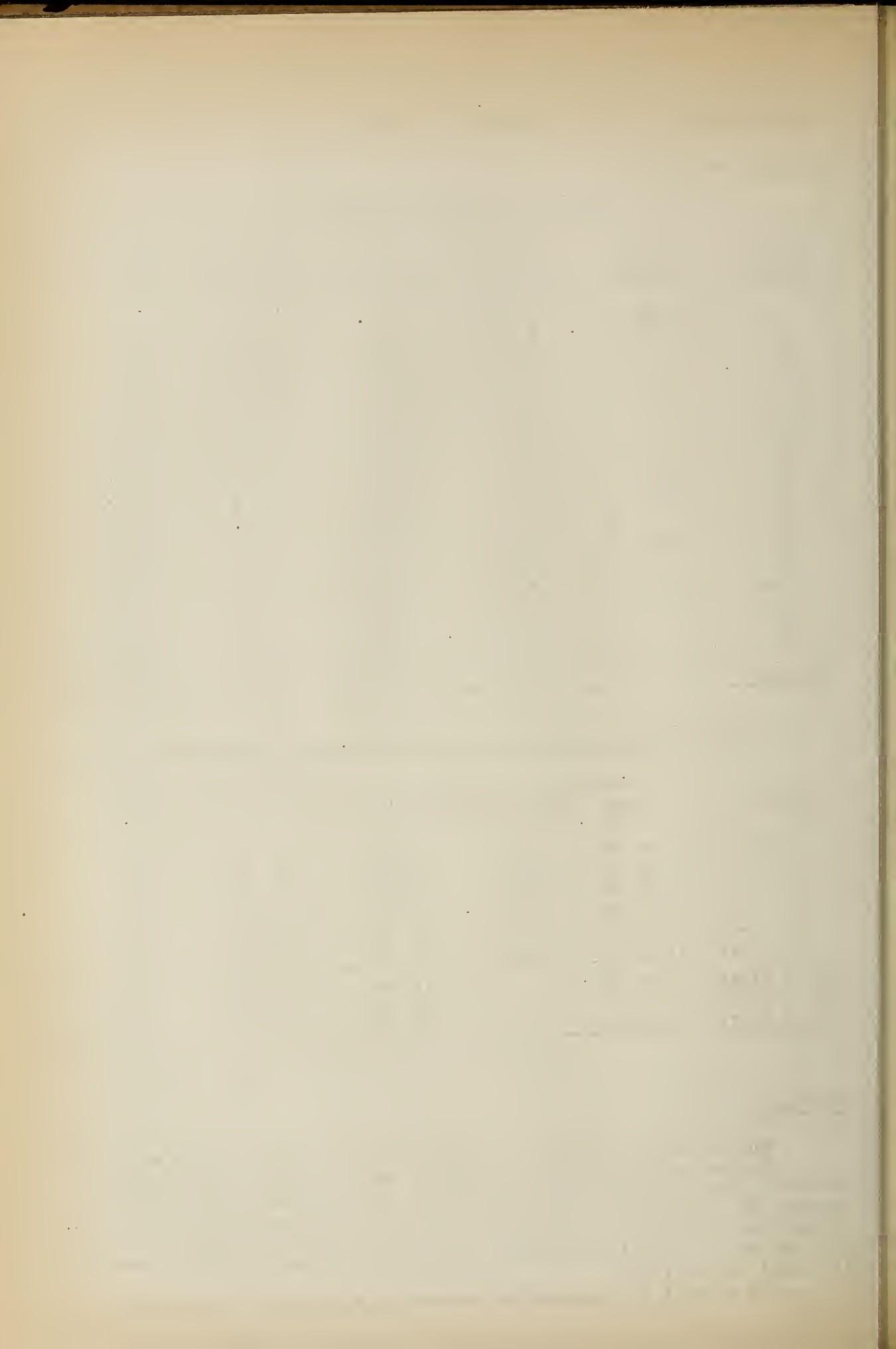
Dan Hansen.

Newlands

For the period October 6 to October 13 Mr. Knight reports as follows:

The meteorological data recorded at this station for this period follows: Mean maximum 59.3, maximum 66 on the 8th; mean minimum 35.7, minimum 26 on the 12th. There was .66 of an inch of rainfall on the 12th, .01 inch on the 13th, and .30 inch on the 11th, making a total of .97 inch. The .30 inch on the 11th was due to two inches of snow that fell during the night of the 10th.

The work at the station has consisted of harvesting beets and



Newlands (continued)

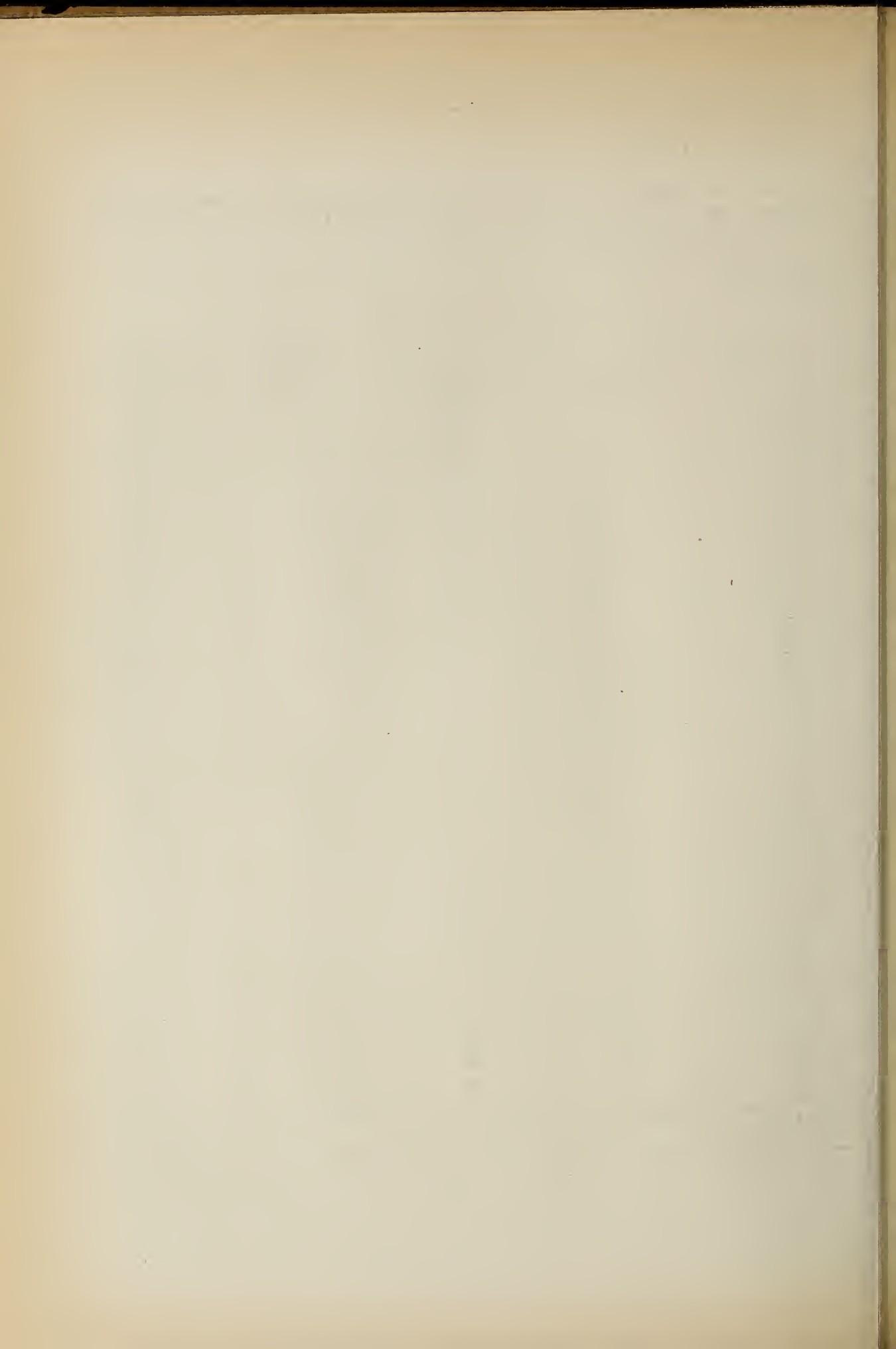
potatoes and repairing the roof of the barn, pump-house, and bunk-house. This year the yield of the beet plots are unreliable due to the presence of the curly-top disease.

Following is a table giving the results of the three cuttings of alfalfa hay.

ALFALFA YIELDS IN 1924.

Plat No.	Total yield Pounds	Area Acres	Yield per acre		Yield per acre Tons
			Pounds	Tons	
B-11-22	17,050	.420	4,060	2.03	
D- 2	1,375	.32	4,296	2.15	
- 3	1,400	.34	4,115	2.06	
- 6	2,175	.52	4,182	2.09	
- 7	2,300	.51	4,510	2.26	
F- 1	875	.25	3,500	1.75	
- 2	1,200	.25	4,800	2.40	
- 3	1,300	.25	5,200	2.60	
- 7	1,400	.25	5,600	2.80	
- 8	600	.25	2,400	1.20	
-10	500	.25	2,000	1.00	
-12	1,100	.25	4,400	2.20	
-13	2,380	.25	9,520	4.76	
-14	1,800	.25	7,200	3.60	
-15	2,175	.25	8,700	4.35	
H- 1	2,900	.40	7,250	3.62	
- 2	2,825	.40	7,062	3.53	
- 3	3,875	.40	9,688	4.84	
- 4	4,175	.40	10,437	5.22	
- 5	4,575	.40	11,438	5.72	
J- 1	3,025	.49	6,173	3.09	
- 2	2,150	.49	4,389	2.19	
- 3	2,700	.49	5,510	2.76	
Y- 2	2,000	.45	4,444	2.22	
- 3	3,000	.45	6,666	3.33	
- 4	2,225	.45	4,944	2.47	
- 5	2,100	.45	4,666	2.33	
- 6	2,925	.45	6,500	3.25	
- 7	2,750	.45	6,111	3.06	
- 8	1,975	.45	4,389	2.19	
- 9	1,925	.45	4,272	2.14	
-10	1,975	.45	4,389	2.19	
-11	625	.45	1,389	.69	
-12	975	.45	2,167	1.08	
Totals	86,330	16.81			
Average			5,136	2.57	

E. W. Knight.



Demonstrations on Reclamation Projects.Belle Fourche

Heavy rains prevented much travel by automobile during the week ending October 11; three days were spent in office work.

The Vale community held an interesting meeting on Tuesday evening, at which time representatives from Belle Fourche, Nisland, and Newell, met to discuss the growing of pickles along with sugar beets as a cash crop. The Squire Dingee Company of Chicago is ready to install pickle salting stations at three project shipping points if 300 acres of the crop are signed up by prospective growers. Nearly the full acreage has been secured, and the pickle industry now seems assured.

Local market prices:

Butterfat	.34¢	Alfalfa hay	
Eggs		in stack	\$6.50
No. 1	.37	f.o.b.	12.50-13.00
No. 2	.32	Wheat	
Hogs		spring	1.13 bushel
fat	.075	Oats	1.25 cwt.
feeders	.07	Barley	1.25 cwt.
Sheep		Corn	2.00 cwt.
ewes	.07		
feeders	.10		

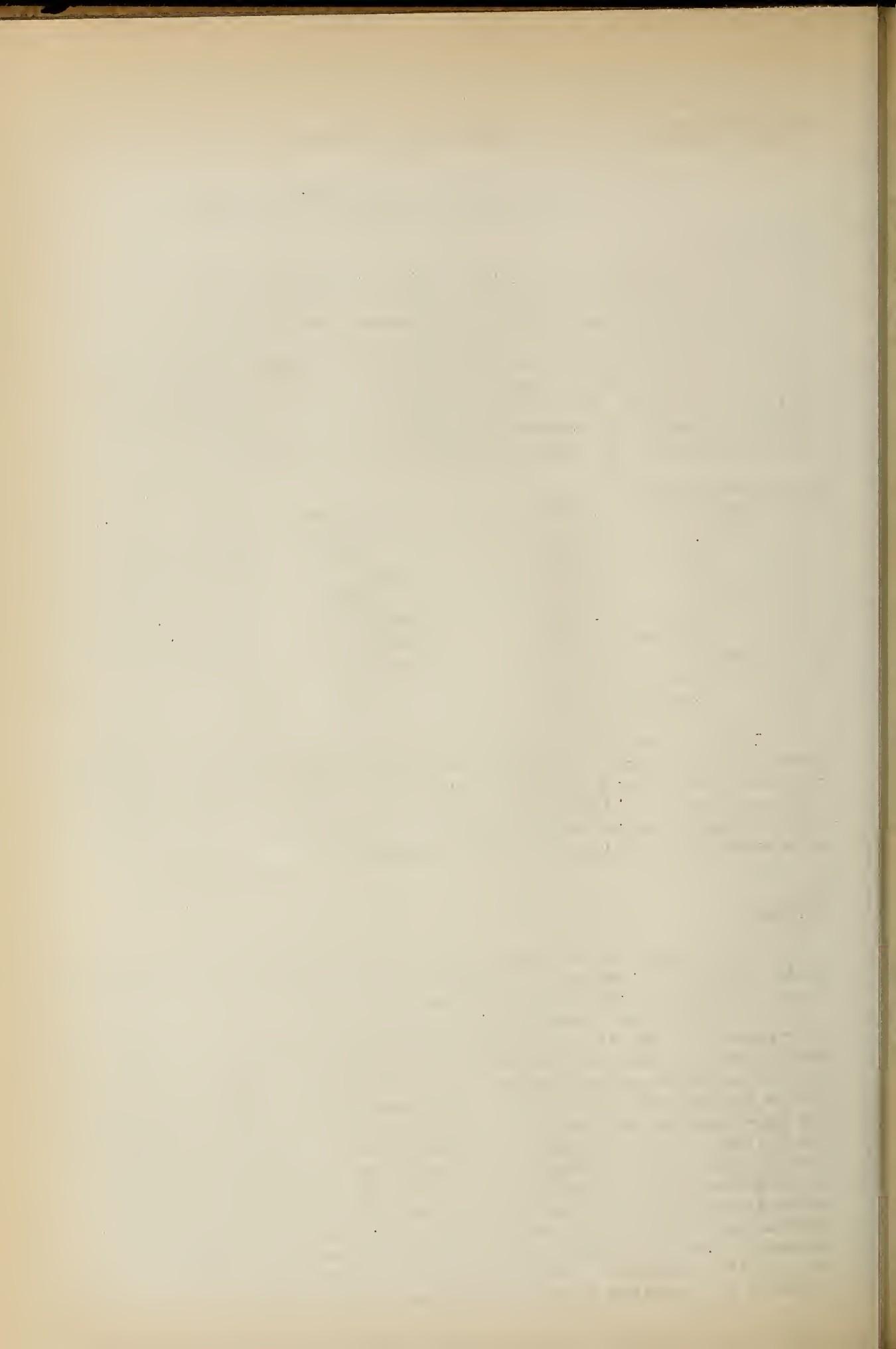
The culling of poultry flocks and egg production records were begun on three farms. A carload of registered Ayrshires from Hot Springs will undoubtedly be shipped in to supply the needs for the continuance of club work and for dairymen who wish to try out a few head of registered stock. Several bulls will be included in the shipment. The local available supply of Ayrshires for sale is exhausted.

Frank E. Miller.

Flathead

The weather was moderately warm and comfortable the entire week ending October 11, making it agreeable at the demonstration and the Fairs, which took up practically the whole week.

On Sunday, Mr. Granaard of the Agricultural Credit Corporation of Minneapolis, and the agricultural development agents of the N. P. Railroad in this region, Mr. Haw and Mr. Benson, were conducted on a tour of the Valley by the project manager, the agriculturist, and citizens, with a view to interesting the Credit Corporation in loaning money for sheep and dairy cows on the project. Mr. Granaard was favorably impressed with the Valley. A local committee to handle the applications for loans was formed. One already existed in the north end of the project at Polson; so this committee was formed in the south end. The agriculturist requested consideration of applications to buy cattle locally instead of sending out of the State, and the proposition was considered favorably because of the fact that a number of testing association cows are for sale on their records. Local purchases of dairy cattle have not been financed for sometime by the Corporation, as the temptation to shift loans



Flathead (continued)

from banks to the Corporation had been too great.

The last of three poultry demonstrations was conducted by Miss Cushman on Monday. Turkeys were demonstrated on, featuring the killing, picking, and packing.

The Round Butte community exhibit was participated in on Tuesday, and on Wednesday assistance was given at Polson in making arrangements for the project exhibit and Lake County Fair.

The last three days of the week the agriculturist spent at Polson at the Fair. There was a very good quality exhibit of Guernseys and Holsteins, and a few Jerseys were on exhibit. The quality and quantity surpassed those at the Missoula Western Montana exhibit. Five of the six highest Guernseys were from the carload received the last of September from Wisconsin. This was in the grade class. The purebred prizes, however, went to animals that have been on the project for several years. Pictures were taken of the exhibits and of the prize winners. A junior-judging contest was conducted. The Cow Testing Association was represented by a booth with the tester in attendance. In connection with this booth were two purebred Holstein cows from the same herd on exhibit as the principals of a judging or guessing contest. The production of butterfat of each, and the weights of each, were estimated by the people; and a three years' subscription to Hoard's Dairymen was awarded to the winner. The underlying idea of the contest was to bring out that guessing was a poor substitute for testing; as the 1700-pound cow with a very good dairy conformation, as generally accepted, produced only 82 pounds of fat, while the 1270-pound cow, much inferior in conformation, produced 152 pounds of fat in a corresponding period. The Testing Association records on these cows were announced on Saturday. It was a very satisfactory demonstration in favor of the Testing Association. Pictures of this have also been taken.

Butterfat went up to 35¢ and 37¢ at the local station. Eggs are bringing 40¢.

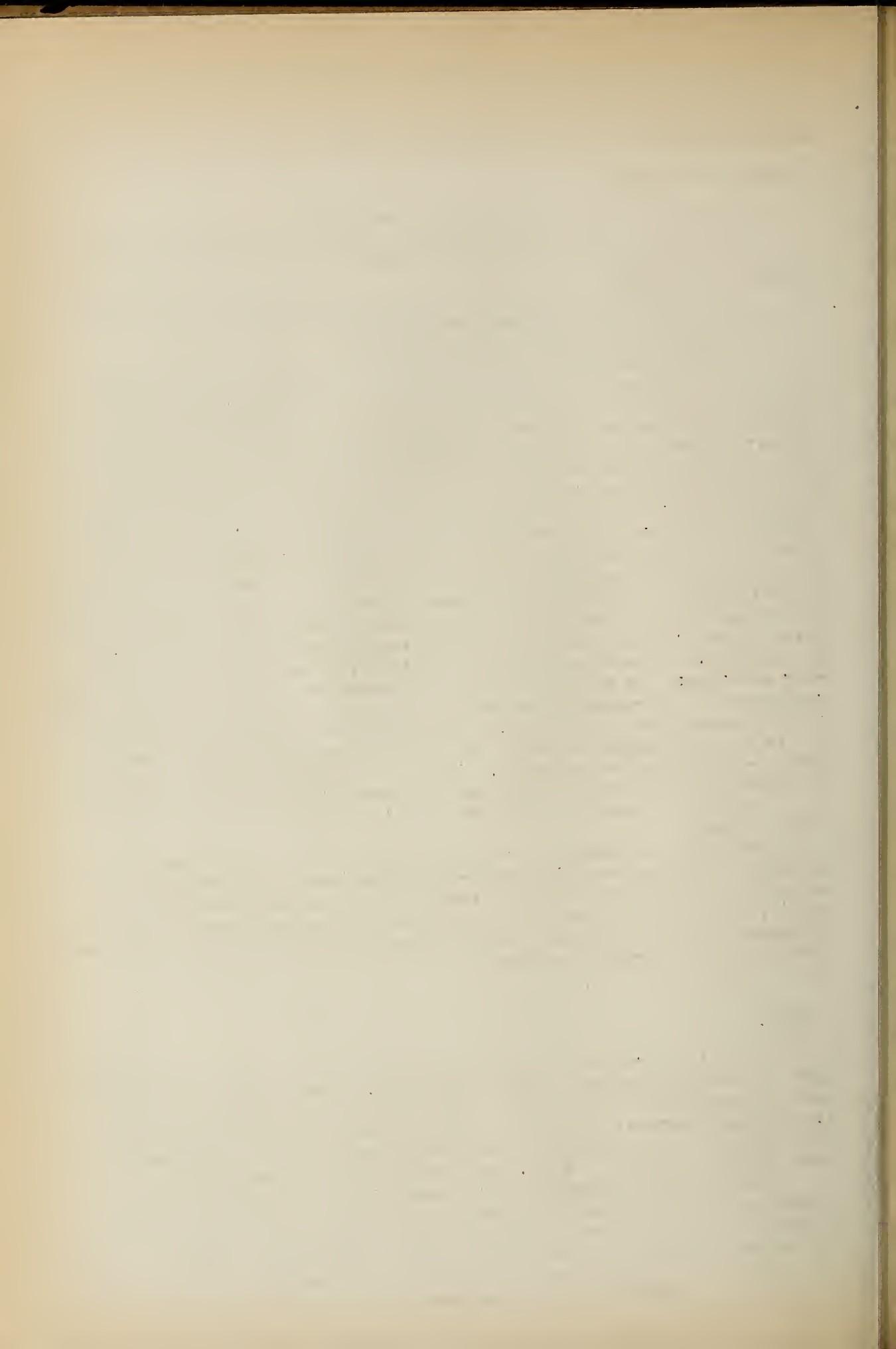
The Fair was acclaimed very successful. Part of this was due to community exhibits from nine different communities. The products of the projects were very attractively displayed and were surprising to most people. Pictures were taken of these by a professional photographer for permanent record and for use in the Montana Month in December, to be conducted by the railroads and locally.

L. B. Miller.

Newlands

The first precipitation of any consequence (amounting to almost an inch) fell during the week ending October 11. Included in this was an inch of snow, which soon melted. This precipitation came at a very bad time for hay harvesting. Much of the third crop was in various stages of harvesting, and the rain will cause considerable damage to the hay and loss of time in putting it up. Some fields are not yet cut.

The principal activity on the project at the present time is the importation of livestock from outside the project for feeding purposes. Considerable time was spent by this office in assisting in locating feed and accommodations for these outside herds. During the months of August and September 231 cars of cattle and sheep were brought into the project for feeding. Included in these shipments were fifteen dairy herds. Some



Newlands (continued)

of these herds will remain permanently on the project.

The advertising scheme, which was started a month ago with money contributed by hay growers, is still being carried out, and will probably be continued throughout the winter in the hope that all surplus hay will be marketed.

L. E. Cline.

North Platte

Practically the entire week ending October 11 was devoted to matters in connection with the better dairy sires train, which visited Scottsbluff Friday and Bayard Saturday. The train is being run by the Burlington Railroad in cooperation with the University of Nebraska, the Nebraska Dairy Improvement Association, and the dairy cattle breeders associations of the State.

The train of 13 coaches left Lincoln October 6. Scottsbluff was the last stop westward. The route back to Lincoln will be through the southern part of the State. The last date on the schedule is October 23. Each day two stops are made, and at each stop a purebred bull is exchanged to a local farmer for a scrub. A total of 31 purebred bulls will be exchanged for scrubs. The bulls carried on the train were donated by breeders of the State, and consisted of 27 Holsteins, 2 Jerseys, 1 Guernsey, and 1 Ayrshire.

At each stop local organizations cooperate, and the day is devoted to boosting for better dairy sires and the dairy business in general. At Scottsbluff the Chamber of Commerce gave away a grade Holstein cow. Each farmer who went through the train was given a ticket, and those holding tickets drew for the cow. At Bayard a purebred Holstein heifer was given away in a similar manner by the Chamber of Commerce.

In connection with the program at Scottsbluff, farmers were asked to bring in grade or scrub bulls used on dairy herds and exchange them to local breeders for young purebred bulls of one of the dairy breeds. In order to encourage such an exchange, the Chamber of Commerce gave to the man bringing in the scrubbiest bull \$25.00 in cash if he would exchange him for a purebred. Other prizes for making these exchanges were \$15.00, \$10.00, and \$5.00. A total of four scrub bulls were exchanged for purebred during the afternoon.

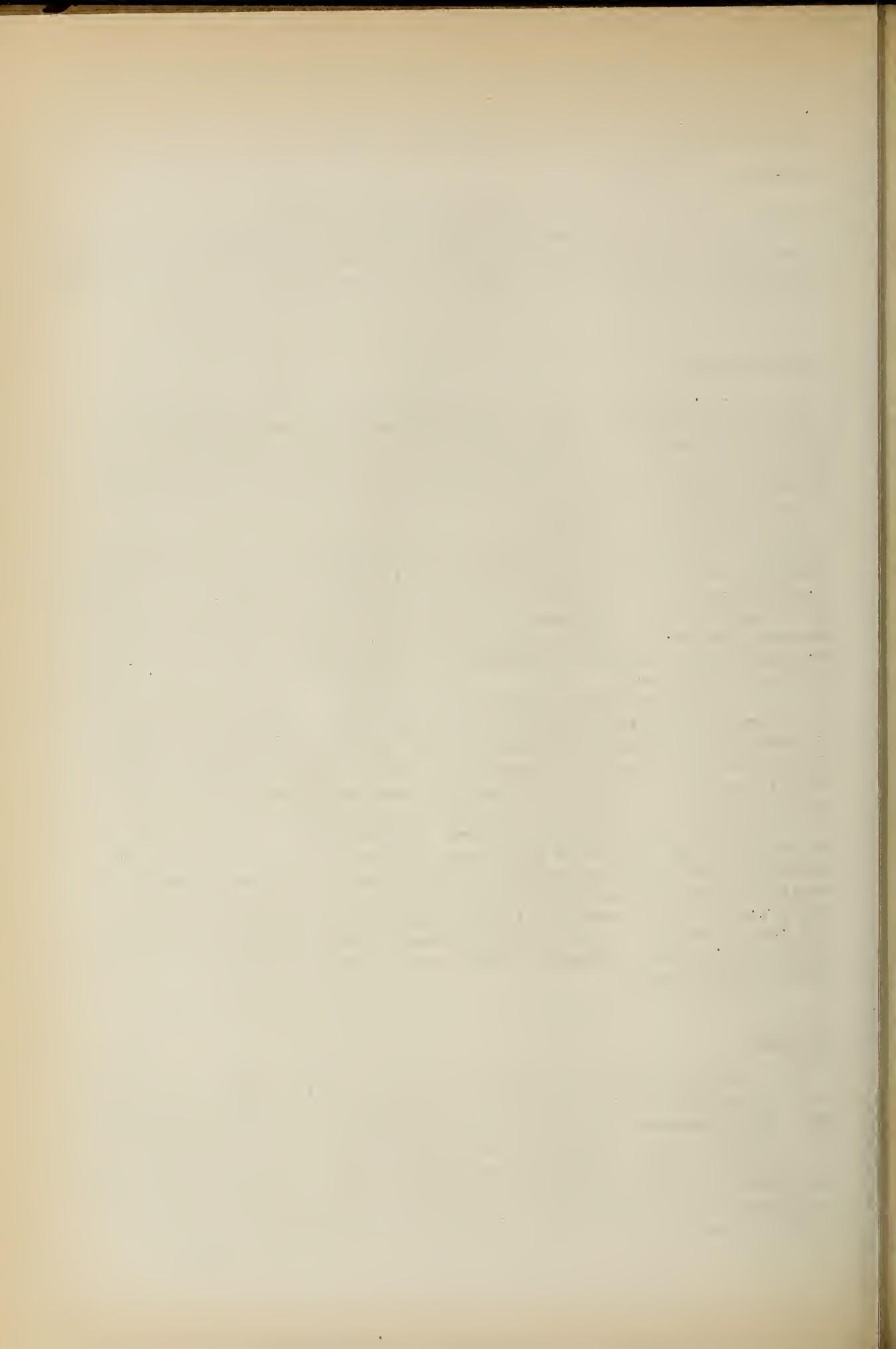
D. H. Propp.

Shoshone

With the exception of Monday, the week ending October 11 has been cold and cloudy. Rain and snow fell Wednesday and Saturday. There are still some potatoes to dig and about one-third of the beets to pull.

I have spent half of the week looking for sheep for sale. Have heard of a flock of 1100 ewes near Hardin, Montana, and have been promised first chance at them. One farmer took 65 beewees, which were the cut backs from about 18,000 head. They averaged 34 pounds, and he paid 10 cents a pound.

O. J. Grace.



W E E K L Y R E P O R T S
Of the Offices of
WESTERN IRRIGATION AGRICULTURE
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Vol. XXV.

October 18, 1924.

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Western Irrigation Agriculture.

Scottsbluff

The average maximum temperature for the week ending October 18 was 71, with a maximum of 76 on the 16th and 17th; the average minimum was 39, with a minimum of 31 on the 13th. No precipitation for the week was recorded.

The entire week was spent in harvesting the potato crop. The yield was heavy, the maximum being 429 bushels per acre from Rotation 61. Rotation 4 -- the continuously cropped plat -- gave a yield of 144 bushels per acre. The average for all plats was 296 bushels as compared with 115 for 1923 and an eight-year average (1917-1924) of 195 bushels. The quality of the potatoes grown on the alfalfa plats was also good. Of the total yield in Rotation 61, only 5 per cent failed to go over a 2-inch screen. The average percentage of culs (those going through a 2-inch screen) for this year was 11 per cent, as compared with 41 per cent last year. A good many yields above 400 bushels per acre have been reported. The following table gives the yields per plat for Field K.

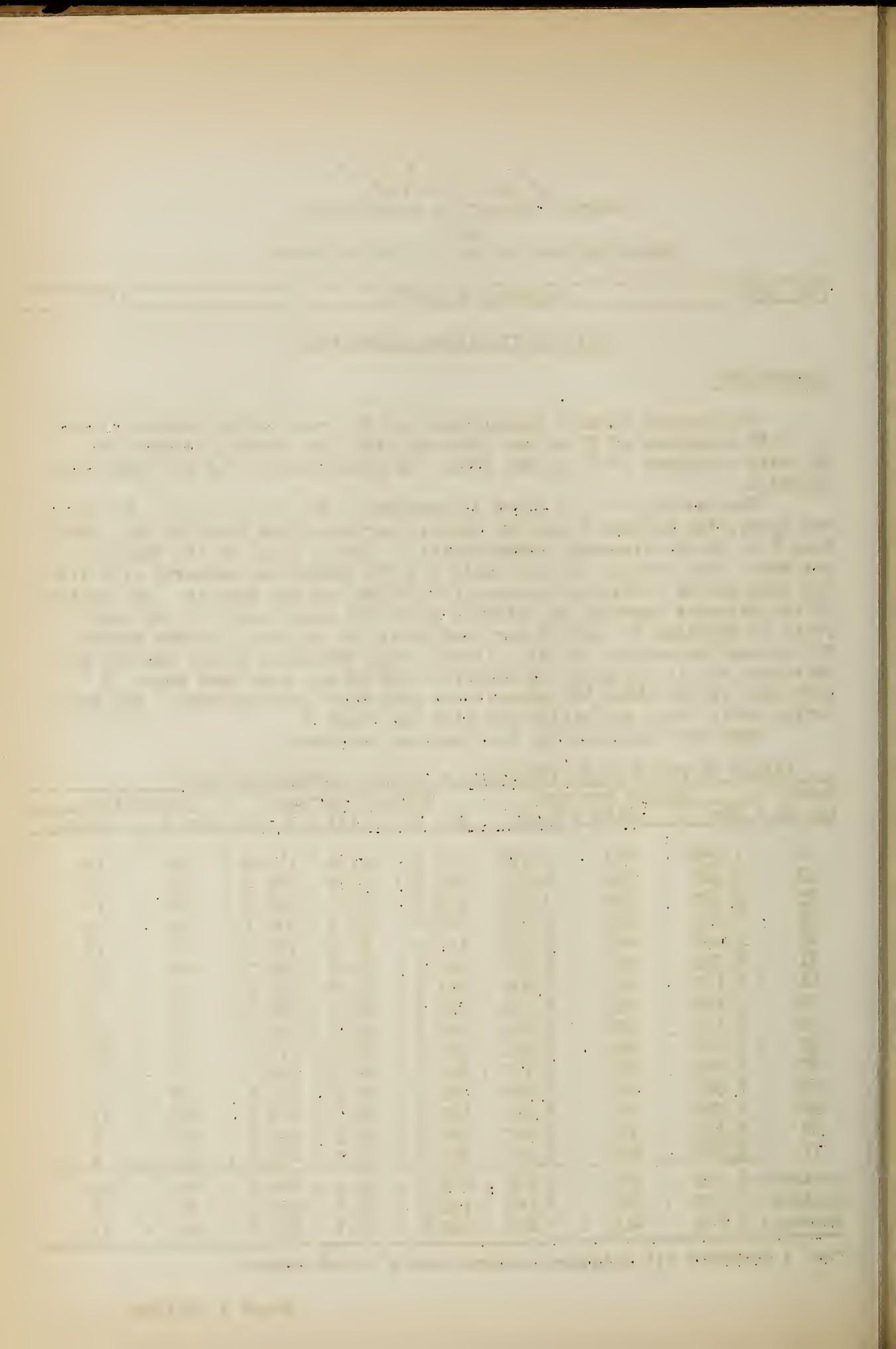
Work will begin on the beet harvest next week.

YIELDS OF POTATOES IN IRRIGATED ROTATIONS EXPERIMENTS 1924.

Rotation No.:	Pounds per plat			Bushels per acre			Percentage		
	*No. 1	Culls	Total	No. 1	Culls	Total	No. 1	Culls	
:	:	:	:	:	:	:	:	:	:
4	1,750	410	2,160	116.6	27.4	144.0	81	19	
27	3,680	390	4,070	245.3	26.0	271.3	90	10	
25	3,570	390	3,960	238.0	26.0	264.0	90	10	
21	4,610	485	5,095	307.4	32.3	339.7	90	10	
26	2,160	460	2,620	144.0	30.7	174.7	82	18	
31	4,390	510	4,900	292.7	34.0	326.7	90	10	
61	6,110	325	6,435	407.3	21.7	429.0	95	5	
40	5,180	360	5,540	345.3	24.0	369.3	94	6	
20	2,105	480	2,585	140.3	32.0	172.3	81	19	
30	2,710	540	3,250	180.5	36.0	216.5	83	17	
60	5,410	320	5,730	360.7	21.3	382.0	94	6	
44	4,820	360	5,180	321.3	24.0	345.3	93	7	
24	2,810	390	3,200	187.3	26.0	213.3	88	12	
64	5,530	330	5,860	368.7	22.0	390.7	94	6	
71	5,660	490	6,150	377.3	32.7	410.0	92	8	
Maximum:	6,110	540	6,435	407.3	36.0	429.0	95	19	
Minimum:	1,750	320	2,160	116.6	21.3	144.0	81	5	
Average:	4,035	415	4,450	268.9	27.7	296.6	89	11	

*No. 1 includes all potatoes passing over a 2-inch screen.

James A. Holden.



Yuma

During the week ending October 18 the maximum temperature was 93°; the minimum temperature was 34°; the greatest daily range was 52°; and no precipitation was recorded.

The lowest temperature so far reported this fall has been 34°, which occurred on the morning of October 12. A light frost was reported in some of the lower sections near the river.

Weather conditions in general are ideal for picking and ginning the cotton crop on the Project. Up to the present time about 10,000 bales have been ginned. There is some shortage of pickers, but this situation is not at all acute at present. The bulk of the crop has been picked for \$1.50 per hundredweight, with an occasional report of from \$1.75 to \$2.00 per hundredweight being paid.

The grade of cotton this year is unusually good. Sales are being made on the grade basis with very little attention given to staple. Local spot prices are around 22 to 23 cents. Cotton seed at the gins is selling for \$18.00 per ton.

Station work performed during the week consisted of plowing plat varieties -- plat C-32 to 35 -- planting vetch varieties on A-8, harvesting the sixth cutting of alfalfa and grain sorghums on the irrigated rotations; selecting seed from grain sorghum flats; repairing irrigation system, and general irrigation.

Edward G. Noble.

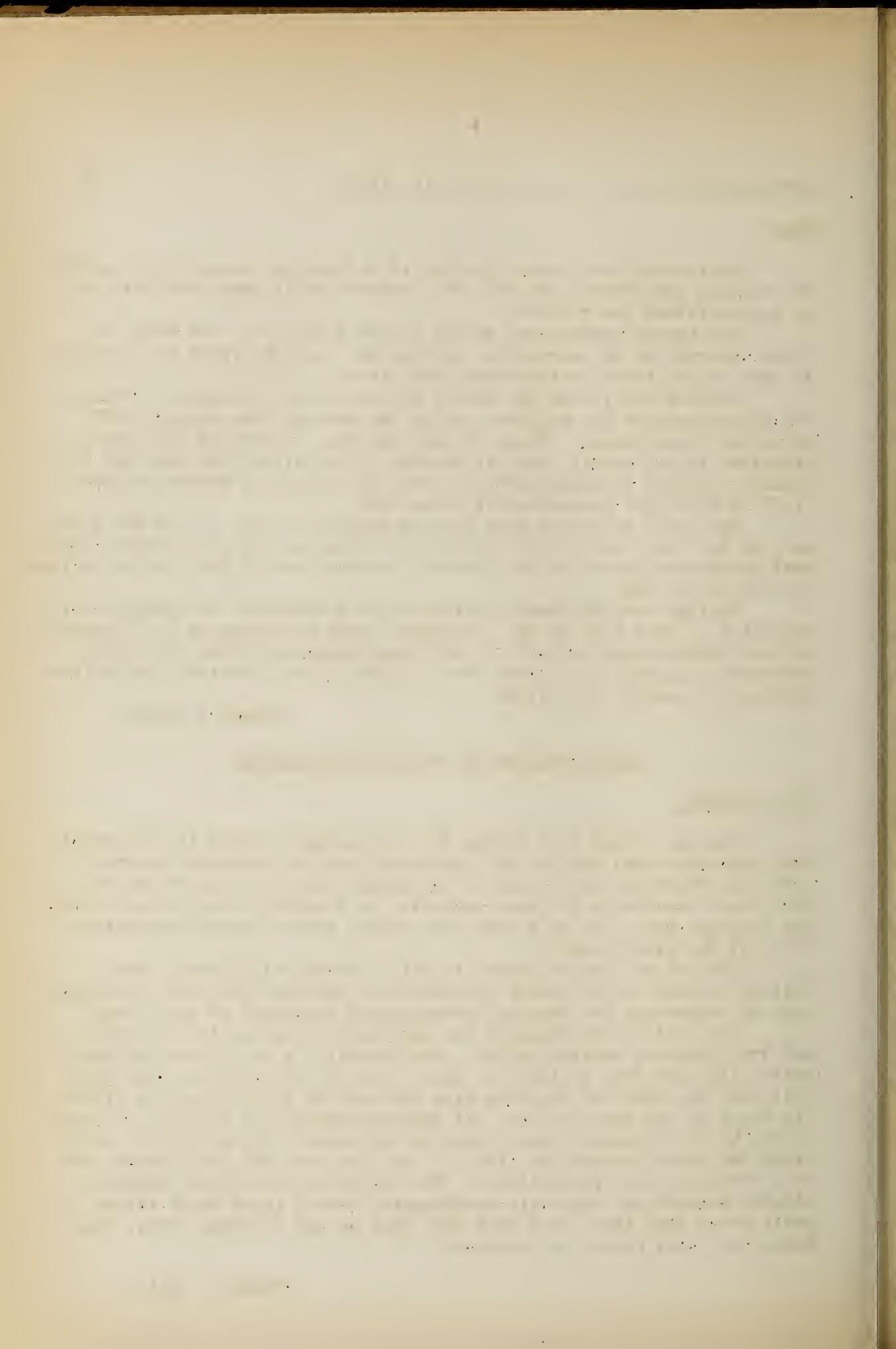
Demonstrations on Reclamation Projects.Belle Fourche

One and a half days during the week ending October 18 were spent with Superintendent Aune of the Experiment Farm in obtaining samples of corn from which the yields can be determined from the farms whose operators were entered in the corn contest. In a number of cases poor stands and immature corn, due to a late, dry spring which delayed germination, will cut the yield heavily.

Part of one day was spent in Belle Fourche with County Agent Ellison in settling up county fair matters; and some time was also spent with the agent and Dr. Dunn in investigating outbreaks of sheep scab.

One article was prepared for publication, one meeting attended, and two flocks of poultry culled. Tom Kennelly, a boy in the pig club, raised six pigs from a litter of nine. The use of a pasture, the grain bill, and the value of the skim milk fed came to \$58.00 for this litter. His sales of one boar and five fat porkers amounted to \$149.65. To this should be added premium money taken at the county fair of \$34.50, which gives Tom total receipts of \$184.15. The sow cost \$47 last January and will soon have her second litter. The pigs made their cheap gains on alfalfa pasture and skim milk supplemented with a light grain ration until after Fair time, when they were shut up and fed whole corn, wood ashes, and salt from a self-feeder.

Frank E. Miller.



Shoshone

The past week has been very favorable for field work. Nearly all the potatoes are dug, and a few farmers have finished pulling beets. Cattle have been brought in off the range. A cooperative shipment will be made within the next week or two.

A pool of orders for sheep has been made, and some one from the Project will go to Montana to buy about 1200. Practically everything in this part of Wyoming has been sold.

Coyotes have been doing a great deal of damage to turkeys near Deaver. One farmer reports a loss of about 400 out of a flock of 600. A Government hunter will begin work in that territory about the first of December.

O. J. Grace.

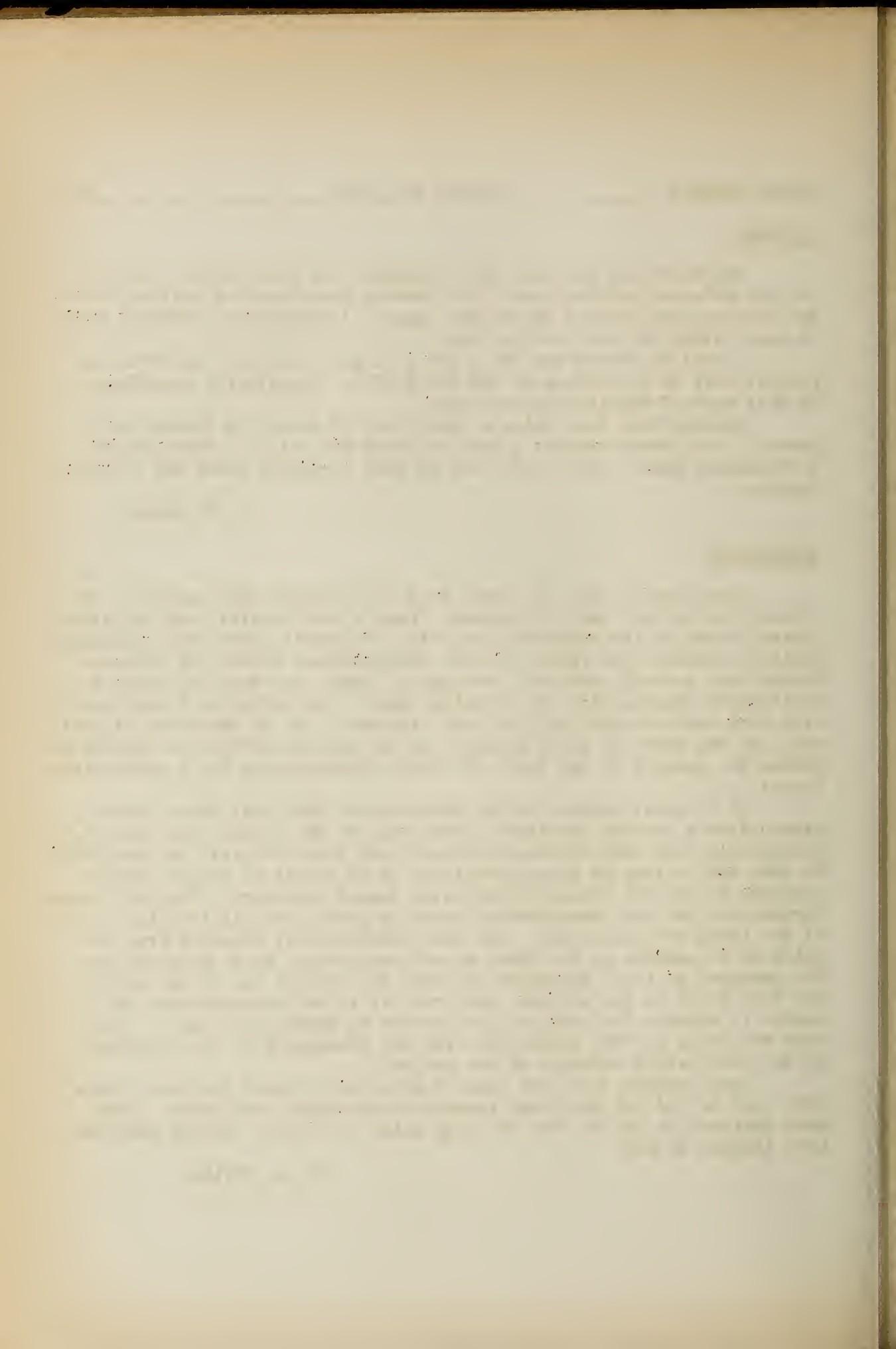
Uncompahgre

Considerable time was given this week to work with poultry. Two flocks were culled, one a high-grade flock of good quality and the other a mixed flock of low producing capacity. Six visits were made regarding poultry demonstration farms: all the demonstrators wanted for Montrose County were secured, and some from Delta. Some time was also given to preliminary arrangements for a poultry show. Two meetings of adults on club work were attended and the work discussed; one of these was at Montrose and the other in Delta County. At the latter, action was started to secure the support of the Board of County Commissioners for a county club leader.

At a recent meeting of the Directors of the local Water Users' Association a special committee, consisting of the acting secretary of the association, the project superintendent, and agriculturist, was appointed to take such action as seemed advisable in an effort to secure greater leniency by the War Finance Corporation toward borrowers. The War Finance Corporation has made considerable loans on cattle in this locality; some of the loans are nearly due. The rule requiring all proceeds from all sales to be applied on the loan, permitting nothing to be retained for the purchase of feed, threatens to force the sale of one of the oldest and best herds on the project; the owner is in bad circumstances and is unable to provide feed for his herd except by proceeds of sales. The case was taken up with Washington from the standpoint of the interests of the beef cattle industry on the project.

Local markets have not changed materially during the week. Eggs have gone to 45¢ and are being imported from outside the State. Hogs have declined to \$10.25 from the high point of \$11.40. Spring chickens have dropped to 12¢.

H. A. Ireland



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Western Irrigation Agriculture.

San Antonio

Meteorological data recorded during the three weeks ending October 25 were as follows: Temperatures- maximum 93, minimum 40, greatest daily range 35. The precipitation on October 22 was .12 inch, October 23, .13 inch. The sky was clear 16 days, partly cloudy 2, cloudy 3.

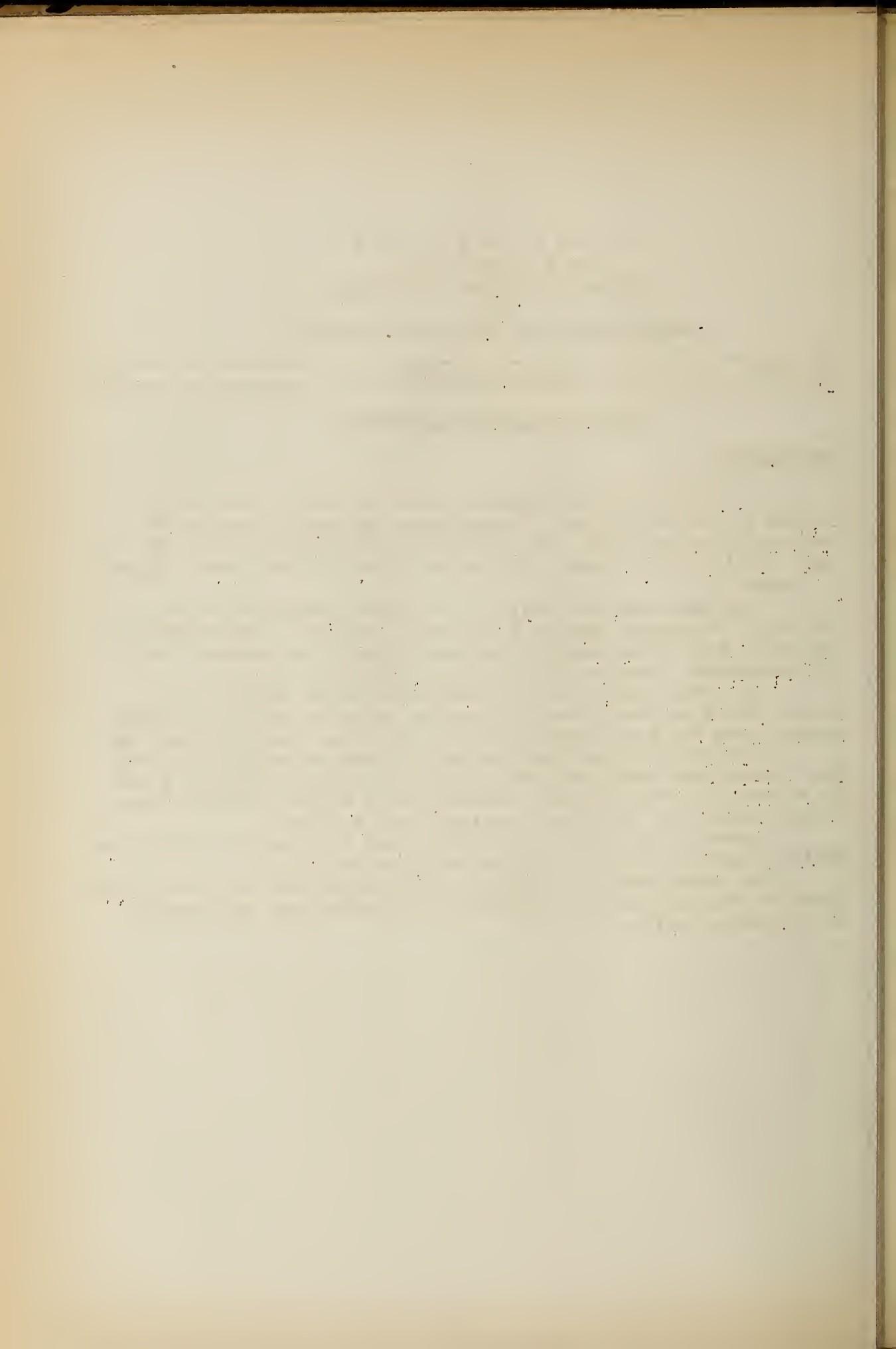
Practically all vegetation, except along streams or where irrigated, is showing more or less serious symptoms of the prolonged drought. There is no available moisture in seed beds prepared for fall plantings. Some seeding in dry soil has been done.

All cotton picking has been completed on the station. All cotton picked and saved for seed from the rotation plats, and Kekchi cotton grown for seed increase, was ginned on the 16-saw, station gin.

Corn samples taken from the loads at time of weighing in from the fields, from which crib-dry weights and shelling percentages were to be obtained, were shelled. Laguna variety of corn, which had been field selected for seed, was re-selected and shelled.

Messrs. O. F. Cook, C. M. Matheny, and R. D. Martin of the Crop Acclimatization Office were station visitors October 18.

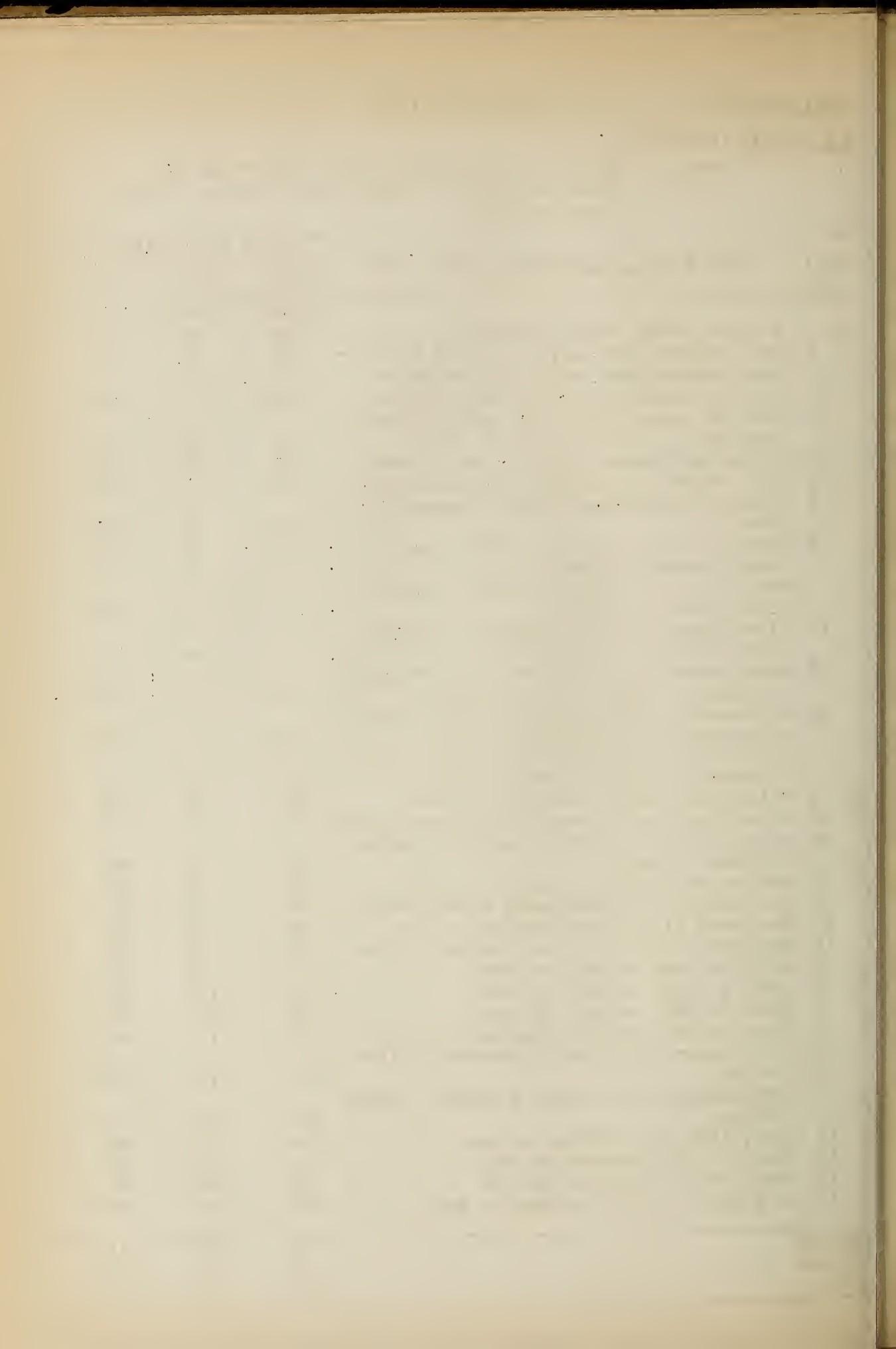
The cotton and corn yields secured from the rotation and tillage plats and the corn variety test during the 1924 season are given in the following tables.



San Antonio (continued)

Table I. Yields per acre secured from each of the 30 cotton plots of the rotation and tillage experiments in 1924.

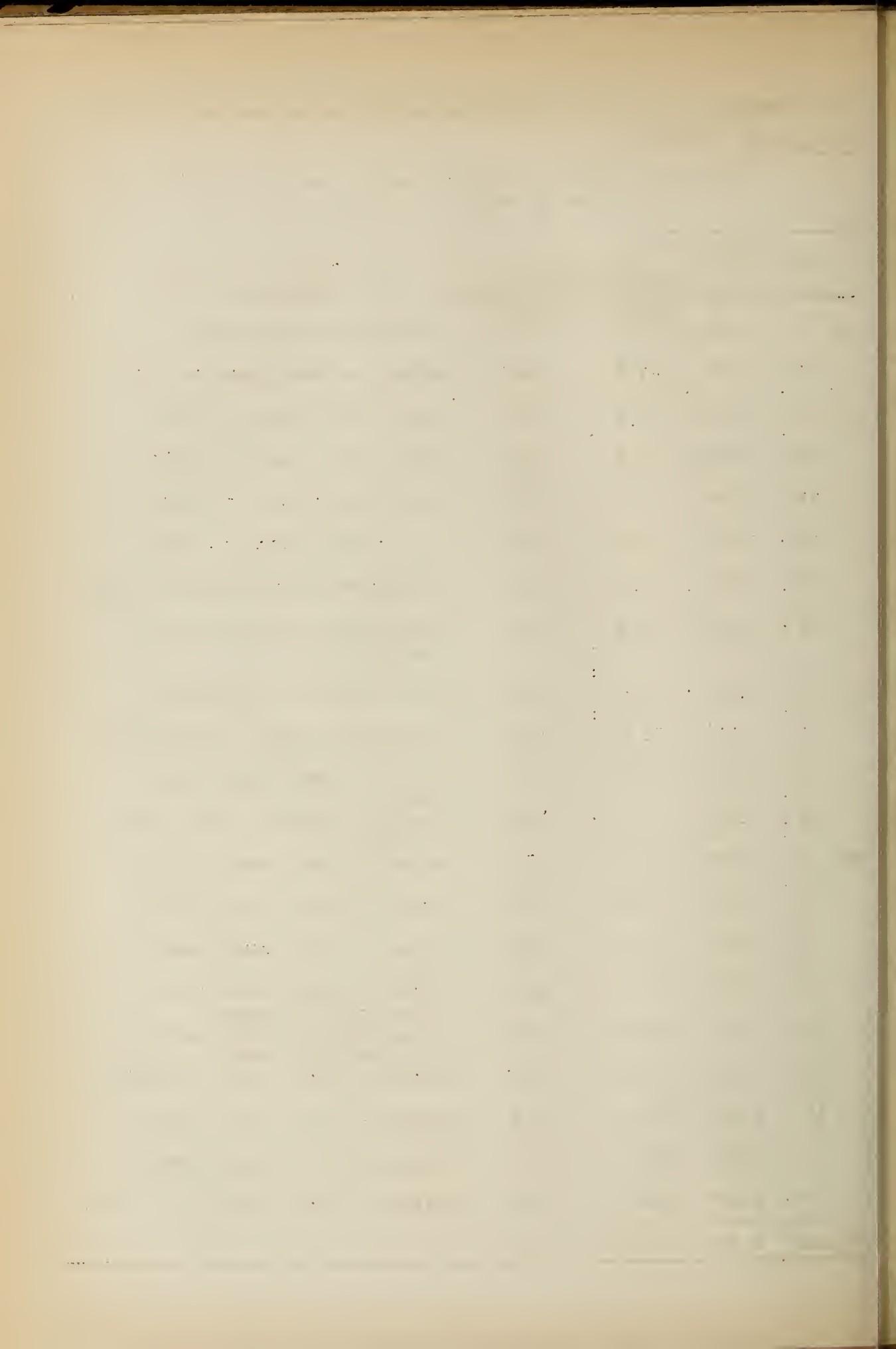
Plat No.	Crop Sequence and Cultural Treatment.	Yield seed cotton		
		First picking	Second picking	Season total
		(pounds)	(pounds)	(pounds)
A4- 2	Fallow; cotton, plowed November	: 82	: 26	: 108
7	: Corn, plowed July; cotton, plowed November	: 213	: 22	: 235
11	Oats, plowed June; milo, field peas, v. : spring; sorghum, v. Nov.; cotton, v. fall	: 278	: 48	: 326
15	Oats, v. June; milo, field peas, v. spring; : sorghum, v. Nov.; cotton, v. fall	: 224	: 42	: 266
19	Cotton continuously, field peas, v. spring	: 227	: 44	: 271
A5- 2	Milo, v. July; oats, v. June; cotton, v. Nov.	: 262	: 70	: 332
5	Milo, v. July; oats, v. June; cotton (manure), v. : Nov.	: 299	: 52	: 351
7	Milo, v. July; cotton, v. fall; oats, v. : June; cotton, v. Nov.	: 171	: 44	: 215
9	Oats, v. June; cotton, v. Nov.; milo, v. : July; cotton, v. fall	: 163	: 66	: 229
11	Milo, (manure), v. July; cotton, v. fall; : oats (cowpeas), v. fall	: 264	: 44	: 308
13	Oats (cowpeas), v. fall; cotton, v. Nov.; milo, : (manure), v. July; cotton, v. fall	: 240	: 42	: 282
15	Milo (manure) SS July; cotton, v. fall; oats : (cowpeas) SS fall; cotton, v. Nov.	: 258	: 46	: 304
17	Oats (cowpeas), SS fall; cotton, v. Nov.; milo : (manure), SS July; cotton, v. fall	: 206	: 62	: 268
A6- 3	Cotton, continuously cropped, v. Nov.	: 210	: 46	: 256
B4-16	Milo, v. July; Sudan grass, v. Nov.; cotton, v. Nov.	: 170	: 46	: 216
19	Milo, v. July; oats (field peas), v. spring; : cotton, v. Nov.	: 256	: 52	: 308
B5- 3	Cotton, continuously cropped, v. Nov.	: 242	: 38	: 280
4	Cotton (manure), continuously cropped, v. Nov.	: 303	: 56	: 359
10	Sorghum (4.1') v. Nov.; cotton, v. Nov.	: 332	: 42	: 374
12	Sorghum (6" drills), v. Nov.; cotton, v. Nov.	: 315	: 55	: 370
18	Milo, v. July; cotton, v. Nov.	: 174	: 70	: 244
B6- 1	Corn, v. July; cotton, v. Nov.	: 205	: 120	: 325
3	Corn, SS July; cotton, SS Nov.	: 134	: 100	: 234
5	Corn (manure), v. July; cotton, v. Nov.	: 311	: 136	: 447
7	Corn (manure), field peas, v. spring; cotton, : v. Nov.	: 457	: 132	: 589
9	Corn (manure), field peas, v. spring; cotton, : SS Nov.	: 498	: 114	: 612
11	Corn, disk July; cotton, v. Nov.	: 244	: 84	: 328
13	Corn, v. Feb.; cotton, v. Feb.	: 141	: 88	: 229
15	Corn, SS Feb.; cotton, SS Feb.	: 203	: 128	: 331
17	Corn (rye), v. Feb.; cotton, v. Nov.	: 180	: 115	: 295
		:	:	:
Maximum		: 498	: 136	: 612
Minimum		: 82	: 22	: 108
Average		: 242	: 68	: 310



San Antonio (continued)

Table II. Yields of crib-dry corn per acre secured from each of the 21 rotation and tillage corn plots in 1924.

Stand :				Crop Sequence and Cultural Treatment.
Plat	plants per acre	Yield per acre	Ear corn: Shelled corn: (Bushels) (Bushels)	
A4- 4	5,888	38.0	37.3	Fallow; corn, plowed July
:	:	:	:	:
7	5,610	41.6	42.3	Cotton, p. Nov.; corn, v. July
:	:	:	:	:
A6- 8	5,640	46.8	46.7	Oats, v. May; corn, v. July
:	:	:	:	:
10	6,632	51.6	51.9	Oats, p. Nov.; corn, v. July
:	:	:	:	:
12	5,144	44.4	44.4	Oats, SS May; corn, v. July
:	:	:	:	:
14	7,000	47.6	47.4	Milo, v. fall; corn, v. July
:	:	:	:	:
16	6,776	57.3	57.6	Oats(manure) SS June; corn, v. July
:	:	:	:	:
18	6,912	57.3	57.5	Sudan grass (manure), v. Nov.; corn, v. July
:	:	:	:	:
B5- 1	6,600	49.8	51.0	Corn, p. July -- continuously
:	:	:	:	:
2	6,776	51.4	51.2	Corn(manure), p. July --continuously
:	:	:	:	:
14	6,952	40.0	40.6	Sorgo(4.1' rows), v Nov.; corn, v. July
:	:	:	:	:
16	6,512	41.9	42.4	Sorgo (8" drills), v. Nov.; corn, v. July
:	:	:	:	:
B6- 2	6,280	60.0	57.9	Cotton, v. Nov.; corn, v. July
:	:	:	:	:
4	6,400	53.5	54.1	Cotton, SS Nov.; corn, SS July
:	:	:	:	:
6	6,544	63.9	65.4	Cotton, v. Nov.; corn (manure), v. July
:	:	:	:	:
8	6,192	60.8	60.8	Cotton, v. Nov.; corn (manure), field peas, v. spring
:	:	:	:	:
10	6,176	59.1	58.8	Cotton, SS Nov.; corn (manure), field peas, v. spring
:	:	:	:	:
12	6,352	55.9	56.7	Cotton, v. Nov.; corn, disk July
:	:	:	:	:
14	6,544	51.6	51.6	Cotton, v. Feb.; corn, p. Feb.
:	:	:	:	:
16	6,560	49.6	50.4	Cotton, SS Feb.; corn, SS Feb.
:	:	:	:	:
18	6,600	54.1	55.2	Cotton, v. Nov.; corn, rye, v. Feb.
<hr/>				
Average	6,385	51.2	51.5	:



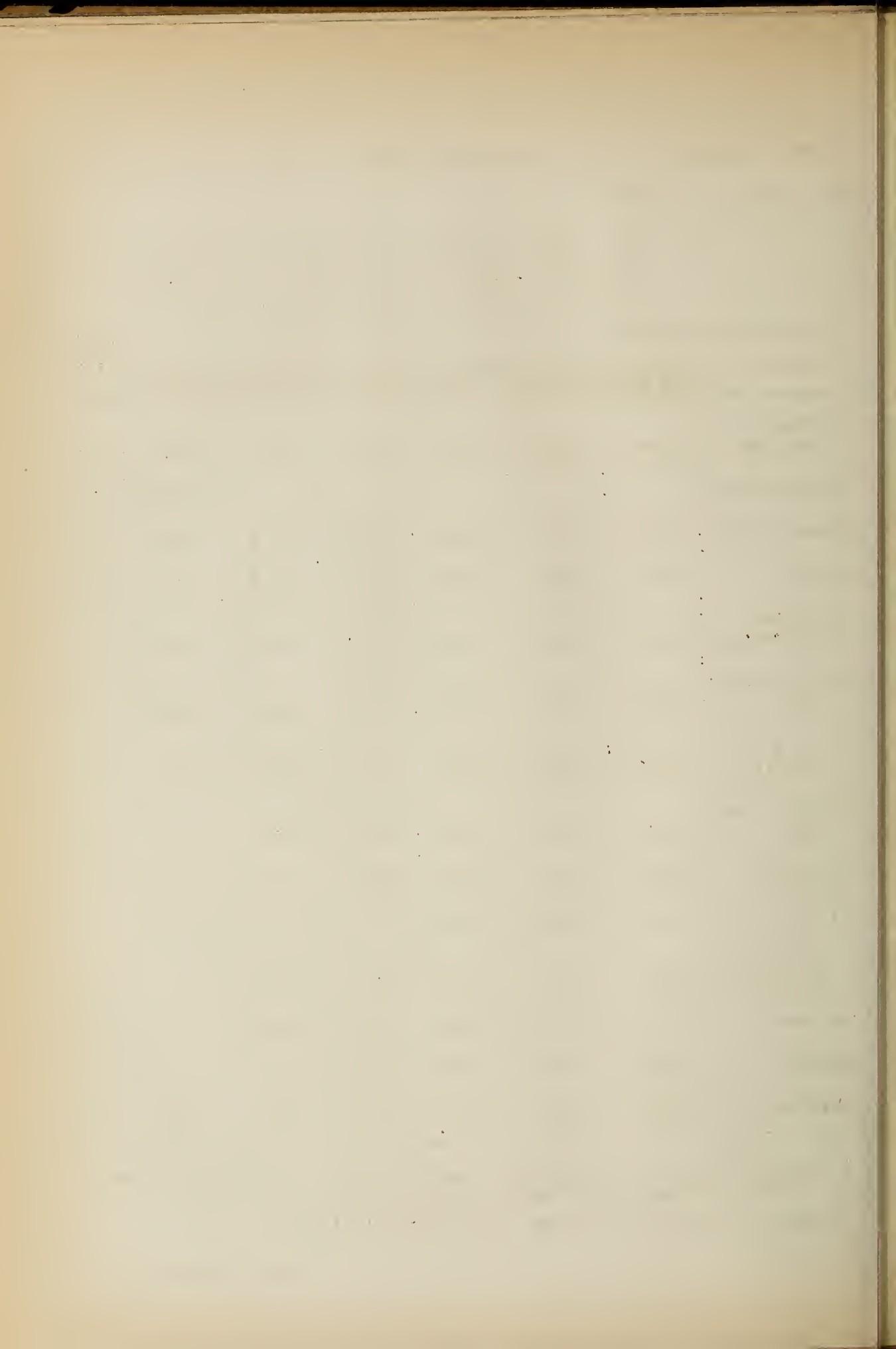
San Antonio (continued)

Table III. Yields of crib-dry ear corn per acre for each plat of each variety, together with stand, in plants per acre, and relative yield expressed in per cent of the yield of check plats.

Variety:	Stand plants per acre			Yield per acre (bushels)			Relative yields ^{1/}
	1st plat	2nd plat	Average	1st plat	2nd plat	Average	
Hastings	:	:	:	:	:	:	:
Prolific	: 6,240	: 5,860	: 6,050	: 59.7	: 57.7	: 58.7	: 104.7
Laguna (Check)	:	:	:	:	:	:	100.0
Brazos White	: 6,360	: 5,480	: 5,920	: 56.9	: 52.3	: 54.6	: 96.8
Horton	: 5,240	: 5,820	: 5,530	: 53.2	: 53.7	: 53.5	: 91.2
Singleton	:	:	:	:	:	:	:
Strawberry	: 6,460	: 5,440	: 5,950	: 55.7	: 44.0	: 49.9	: 88.4
Ried's Yellow	:	:	:	:	:	:	:
Dent	: 5,420	: 6,020	: 5,720	: 44.3	: 54.9	: 49.6	: 87.8
U. S. Selection 119	:	:	:	:	:	:	:
Whatley Prolific	: 6,120	: 5,600	: 5,860	: 53.2	: 48.3	: 50.8	: 87.0
Kaw Chief	:	:	:	:	:	:	:
Pinto Flojo	: 4,200	: 4,600	: 4,400	: 43.7	: 46.3	: 45.0	: 79.7
U. S. Selection 165	:	:	:	:	:	:	:
Surcropper	: 5,320	: 5,680	: 5,500	: 44.3	: 48.0	: 46.2	: 78.8
Iadivis	:	:	:	:	:	:	:
Chisholm	: 5,120	: 3,860	: 4,190	: 47.7	: 30.6	: 39.2	: 66.6

1/ Average yield of each variety as compared with average yield of two pairs of closest check plats, taken as 100%.

2/ Average of nine check plats; guard plats not included.



Demonstrations on Reclamation Projects.Shoshone

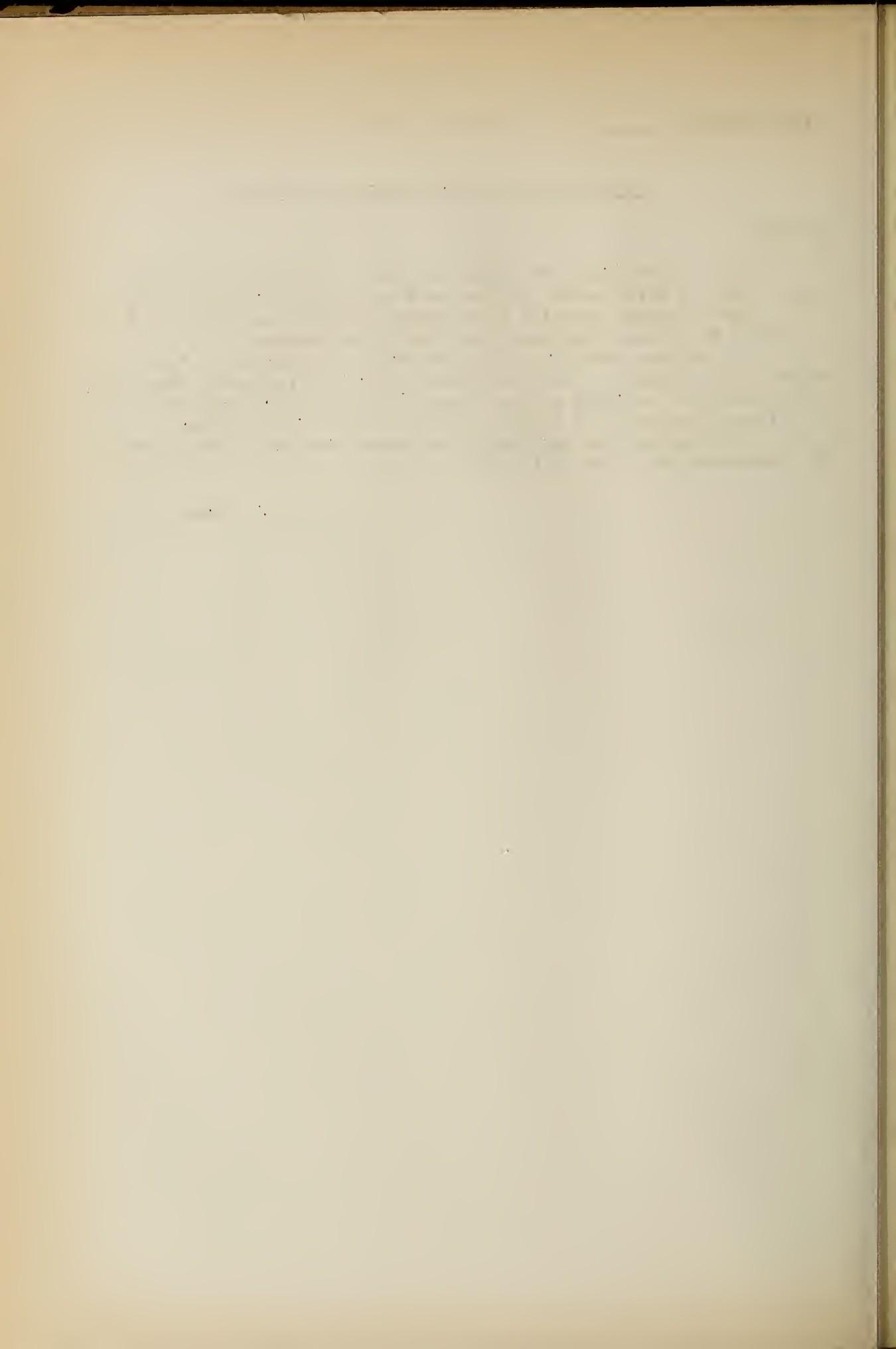
The weather during the past week has been very favorable for field work. A large number of farmers have finished pulling beets.

Three farmers reported losses from blackhead in turkeys. They are using the ipecac treatment with fairly good success.

The greater part of one day was spent in assisting a farmer to start a bean thresher. The bean acreage has been increased this year, and the Project is short of threshers. The yields are fair, but there is a large percentage of immature beans in many of the fields.

Milk samples were collected and tested from the herds in which the Government bulls are being used.

O. J. Grace.



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Western Irrigation Agriculture

Newlands:

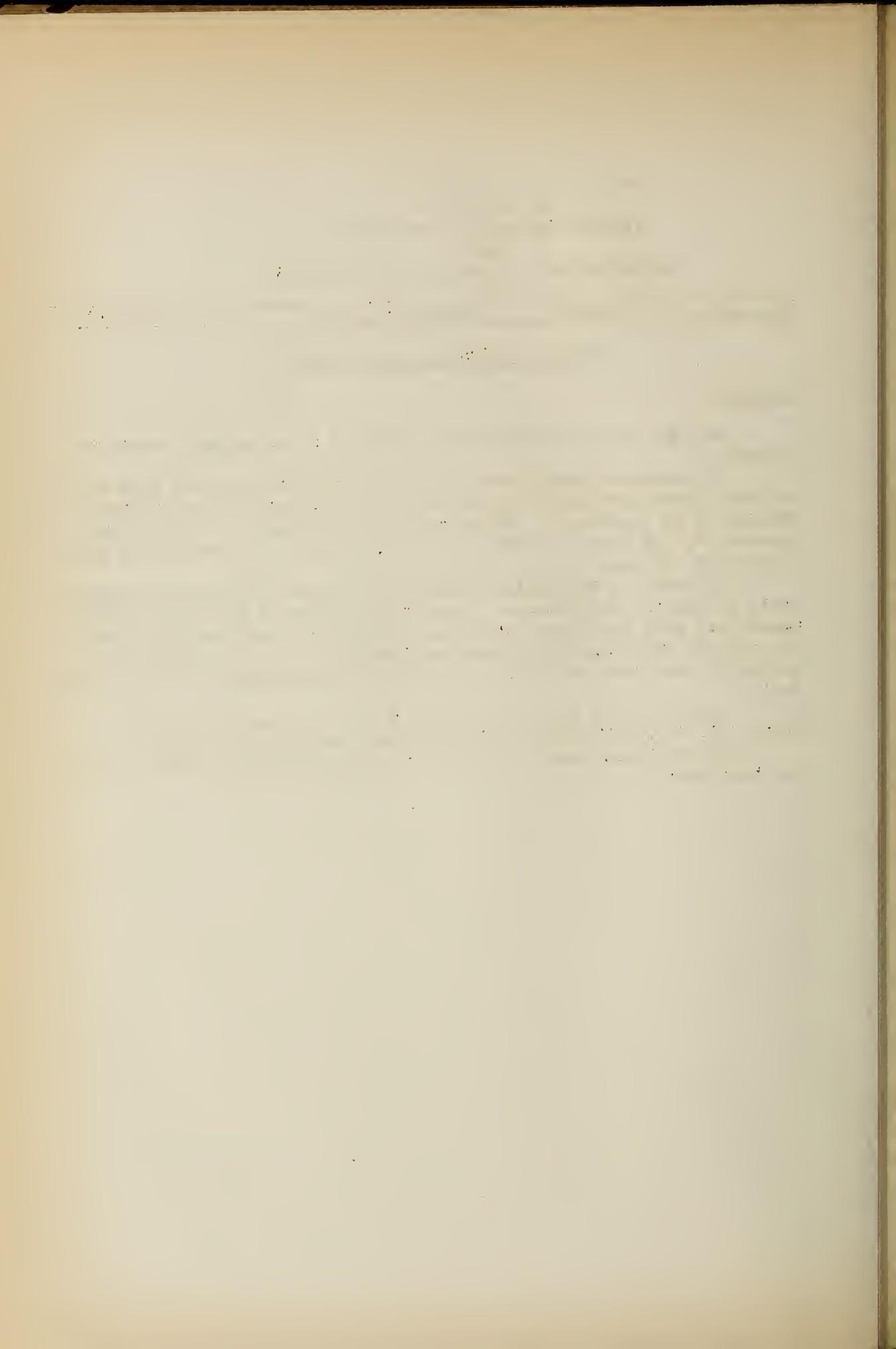
For the period October 12 to November 8 Mr. Knight reports as follows:

The meteorological data recorded at this station for this period follows: Mean maximum 65.6, maximum 77 on October 15; mean minimum 32.0, minimum 16 on November 7. There was .05 of an inch of rainfall on October 28, .08 inch on October 29, and .45 inch on November 8, making a total of .58 inch.

The work at the station consisted of giving the various rotation plats their fall treatments. Gypsum was applied at the rate of 1000 pounds per acre to all the plats on E, F-3, F-5, F-9, and F-15; and at the rate of 2000 pounds per acre to plats D-3 and D-7. Manure was applied at the rate of 15 tons to the acre to plats E-1, E-6, F-3, and F-15.

Plats B-5 and 6, all of G, and the garden have been disked. Plats F-3, F-9, F-15, F-16, D-3, D-4, D-7, and D-8 were plowed.

The following table gives the results of the corn variety test for this year.



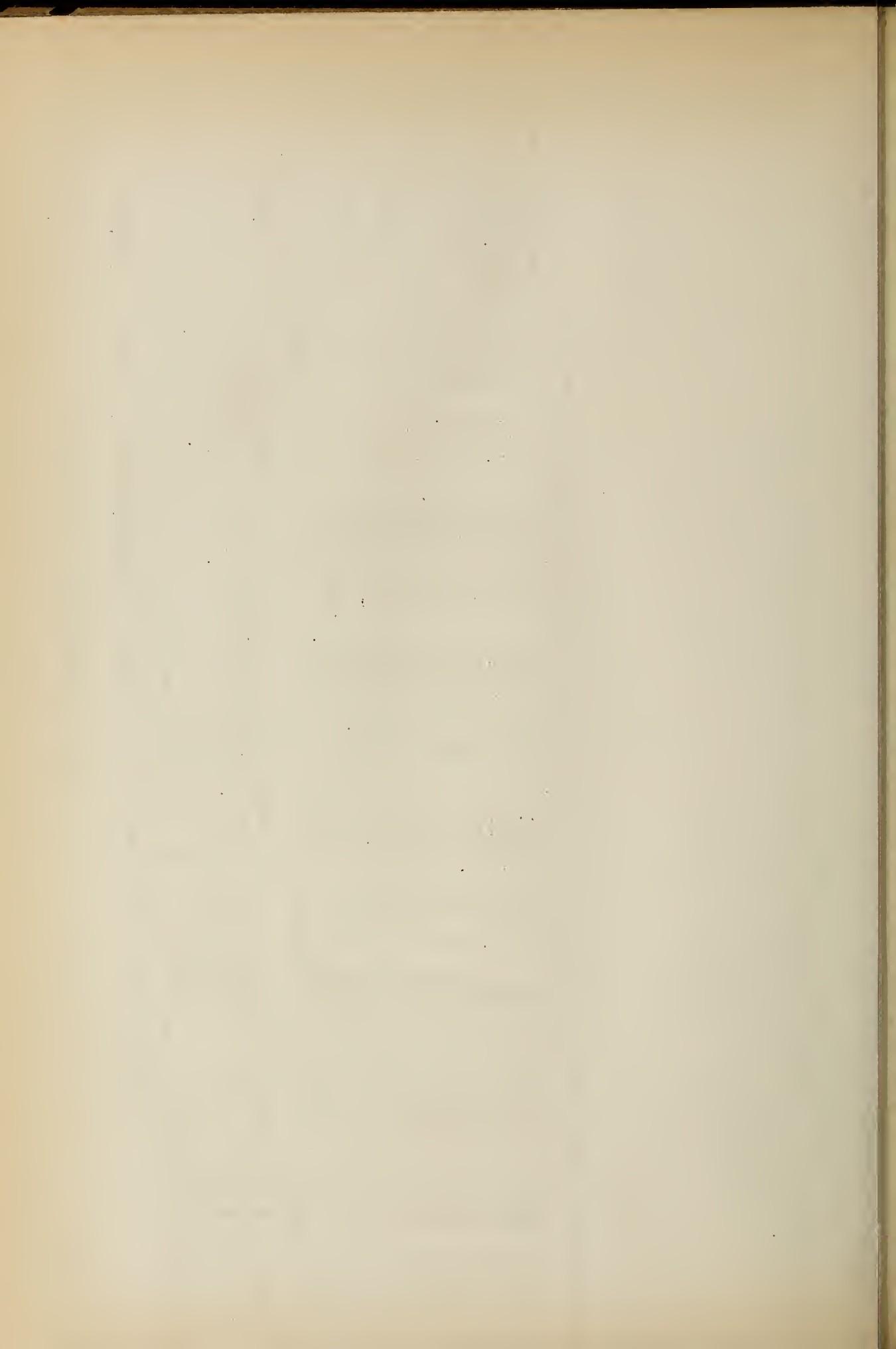
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RESULTS OF TEST OF CORN VARIETIES GROWN ON THE HIGH SCHOOL TRACT IN 1924.

Variety	Average height		Area		Gross	moist	Dry	Yield	Yield	Yield	Yield	Avg. of
	Stalks	ears	acre	%	corn	on	wt. %	dry	Shel-	dry	per	per
	Ft.	Ft.						tbs.	dry	shelled	acres	actual
1: Rainbow	7.0	3.0	.057	8	92	314	72	226	71	160	2,758	3,009
2: De "Olf's Prolific	8.0	3.5	.057	6	97	249	81	202	80	162	2,833	2,890
3: Squaw	6.6	2.5	.057	8	92	265	73	193	77	149	2,578	2,802
4: Early Burdock	7.5	3.5	.057	8	95	250	76	196	79	150	2,595	2,732
5: Wisconsin #7	7.3	3.0	.057	8	88	218	79	172	80	138	2,388	2,714
6: Wimbley Yellow Dent	7.0	3.3	.057	8	98	233	73	170	79	134	2,218	2,365
7: Wisconsin #425	6.5	3.0	.057	8	97	197	70	138	78	108	1,869	2,342
8: Minnesota #13	6.8	3.0	.057	8	94	258	72	166	81	151	1,740	1,898
9: Rustler White Dent	6.8	3.0	.057	8	94	149	76	113	80	90	1,557	1,756
10: Oregon White Dent	7.0	3.0	.057	8	74	137	70	96	81	78	1,349	1,586
11: Golden Surprise	8.5	4.0	.057	8	95	150	67	101	81	62	1,419	1,494

E. M. Knight.



Demonstrations on Reclamation Projects.Newlands

The report for the period ending November 8 is as follows:

An innovation in the method of marketing cream from the Newlands project is being worked out, and it is planned to put this new scheme into operation in Fallon on the 17th of this month. Under this proposed plan all dairymen will deliver their cream to a central testing laboratory in town, where the net weight of the cream and a sample for testing will be taken. The farmer will then deliver his cream to such buyers as he has been doing previously. The butter fat determination will be made at the testing laboratory and sent to the creamery to which that particular cream has been consigned. All settlements will be made upon the basis of the central laboratory tests and weights. This central testing laboratory will be operated under the supervision and authority of the State Weights and Measures Commissioner.

For the purpose of financing the cost of operation of this testing laboratory a charge will be made per can, which will be collected from the various creameries receiving the cream. This testing plan is the outcome of endless dissension over cream tests which has prevailed heretofore under the old system. It is hoped that when the new system is put in good working order that it will be very satisfactory to all concerned. Under this plan there will be no reason for dissatisfaction on the part of the purchaser with the tests. There has been full cooperation of the purchasers of local cream in this centralized testing plan.

The man who will have immediate charge of this work was tester for the local herd testing association for a year, and he is well qualified for the place. If this plan works out successfully, it will no doubt be generally adopted in other cream shipping territories. This office is cooperating in every way to make the undertaking a success.

The marketing of the project turkey crop is going on at a considerable scale now and very satisfactory prices are being received. The Thanksgiving market is yet a matter of considerable speculation. Thirty-eight to forty cents at San Francisco has been the price of dressed turkeys during the week. A second article was prepared on the subject of marketing turkeys and precautions to be taken against black-head during the fattening season.

Mr. Cooley stopped off at Fallon on Saturday while en route West from Washington.

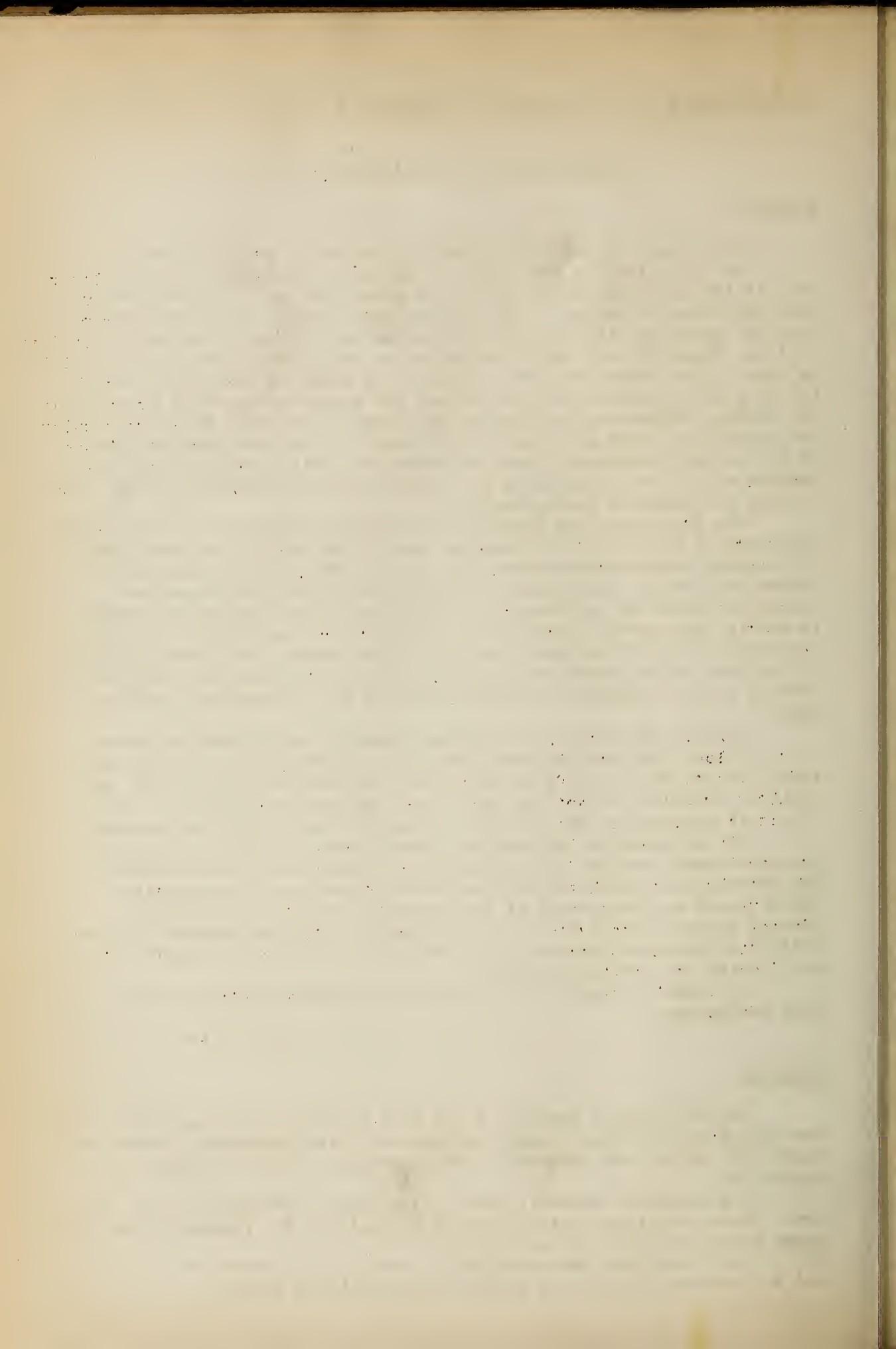
L. E. Cline.

Shoshone

The week ending November 1 has been favorable for farm work except two days that were windy enough to interfere with threshing. Beets are nearly all pulled and delivered. There are some beans and grain to thresh yet.

A cooperative shipment (one car) of cattle was made for ten farmers. There were four good heifers in the lot and the remainder were cull dairy stuff including two old bulls.

One farmer has just completed a year's milk record for his herd, and the butter fat has been computed and tabulated for him.



Shoshone (continued)

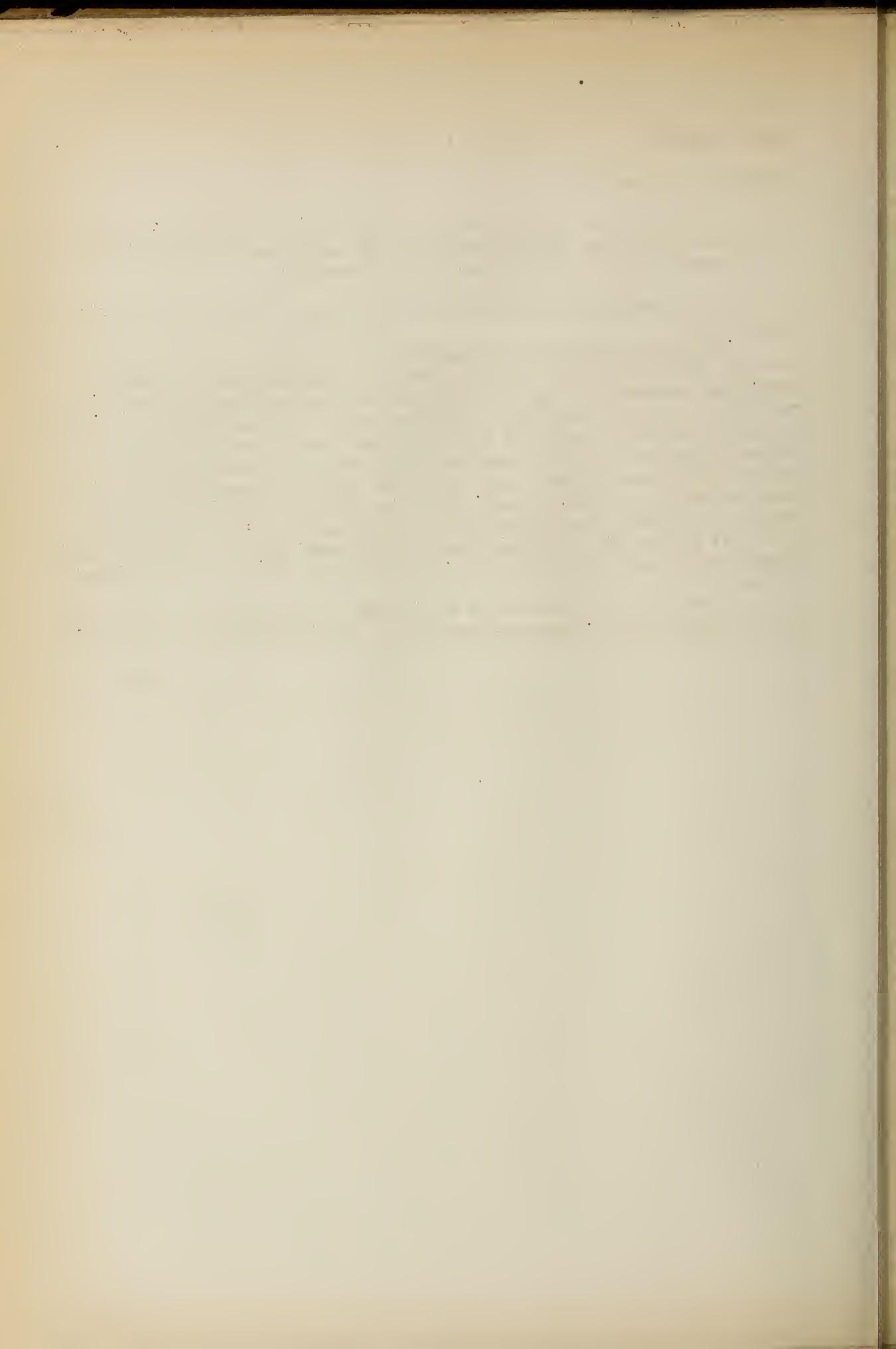
A Farm Bureau meeting at Deaver was attended Saturday evening and arrangements were nearly completed for taking care of the Government trapper while he is working in that territory.

The weather has been colder and very windy during the week ending November 8.

Two cars of turkeys were shipped out of Powell the past week. One car was sold through the Big Horn Marketing Association, a farmers' marketing association, and the other through a local buyer. The greater part of the turkeys were sold alive and dressed before shipping; 31 cents per pound was paid for No. 1 turkeys dressed and 23 cents for No. 2. Farmers delivering No. 2's were urged to take them back and fatten them for the Christmas market. Both cars were loaded to capacity. The Big Horn Marketing Association made the first offer of 27 cents for No. 1's dressed, and their competitor raised to 31 cents. With no competition it is not likely that the local buyer would have paid more than 27 cents. Turkeys were handled in Cody, Deaver, and Lovell by the marketing association.

I assisted two farmers to select 160 old ewes from the cut backs from a flock of 1800 broken-mouthed ewes. They paid \$4.50 per head for them.

O. J. Grace.



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Western Irrigation Agriculture.

San Antonio

Meteorological data recorded at the station during the period from October 26 to November 15, inclusive, are summarized as follows: Temperatures, maximum 89, minimum 46, greatest daily range 36; precipitation .17 inch (in 4 attempts); sky, 13 clear days, 4 days partly cloudy, and 4 days cloudy.

Thirty-three rotation plats and the south end of field A-3 were plowed during the period. The soil is very dry and hard. It will not be possible to prepare seed beds for flax and small grain plantings until a rain of fair proportions occurs, as the enormous lumps of soil turned up in plowing will not yield to any ordinary type of pulverizer.

Six rotation plats were disked and seeded to field peas for green manure.

Stalks were cut on all cotton plantings. This operation was delayed longer than desirable in order to secure an aerial photograph of the farm which would locate all root-rot areas occurring in the cotton fields.

Other work performed included cultivating orchard E-3, sawing stovewood, hauling manure to rotation and tillage plats, weeding fences, recleaning grain sorghum seed, and miscellaneous repair of buildings and equipment.

Geo. T. Ratliffe.

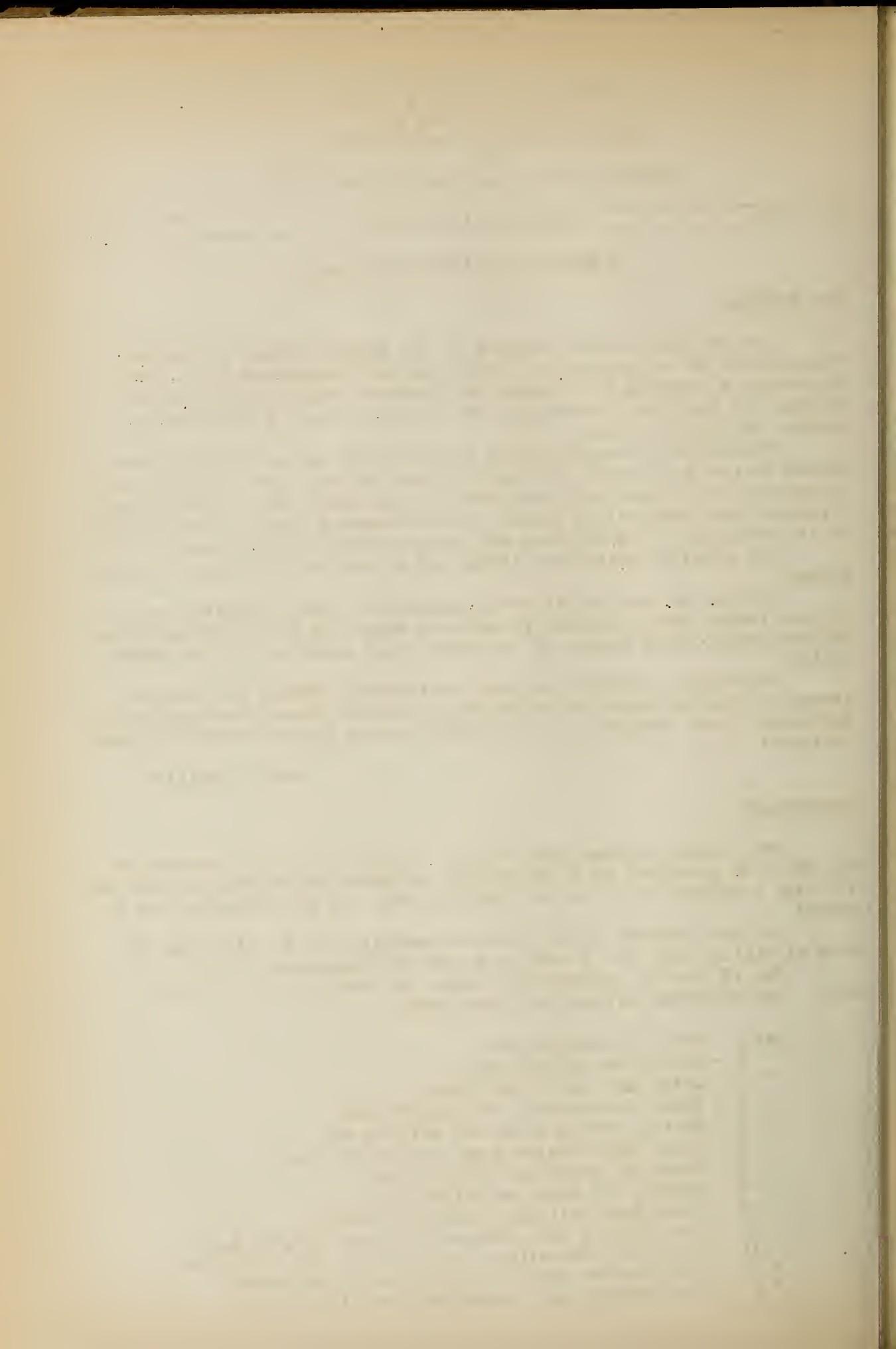
Scottsbluff

The average maximum temperature for the week ending November 15 was 50, with a maximum of 60 on the 9th and 10th; the average minimum was 19, with a minimum of 11 on the 13th and 14th. No precipitation was recorded.

The beet harvest at the Farm was completed on the 11th, and the work of filling Silo No. 3 with beet tops was commenced.

The 13 lots of experimental lambs were placed on feed during the week. The following rations are being used:

- Lot 1 - Corn and alfalfa hay
- " 2 - Barley and alfalfa hay
- " 3 - Dried pulp and alfalfa hay
- " 4 - Corn, cotton cake, and alfalfa hay
- " 5 - Barley, cotton cake, and alfalfa hay
- " 6 - Dried pulp, cotton cake, and alfalfa hay
- " 7 - Corn, oil cake, and alfalfa hay
- " 8 - Barley, oil cake, and alfalfa hay
- " 9 - Dried pulp, oil cake, and alfalfa hay
- " 10 - Corn, cotton cake, corn silage, and alfalfa hay
- " 11 - Corn, beet top silage, cotton cake, and alfalfa hay
- " 12 - Corn, cotton cake, beet tops, and alfalfa hay
- " 13 - Corn, cotton cake, potatoes, and alfalfa hay.



Scottsbluff (continued)

This is the third and last year of this test of rations. The lambs are of very good quality and in good condition.

The field beets are practically all delivered, and only a few more put in silo. The tonnage will be as large if not larger than last year.

The accompanying table gives the yields in Field K — the rotation experiments.

Yield of Sugar Beets in Irrigated Rotations, 1924.

Rotation No.	Pounds per plat	Tons per acre
23	10,080	20.16
21	9,830	19.66
31	8,840	17.68
61	11,325	22.65
40	9,855	19.71
20	6,220	12.56
2	4,535	9.07
18	5,540	11.08
30	6,150	12.30
60	9,110	18.22
42	8,300	16.60
22	5,545	11.09
32	5,215	10.43
62	8,300	16.60
45 (1st year)	11,340	22.68
45 (2nd year)	8,670	17.34
64	10,705	21.59
71 (1st year)	9,670	19.26
71 (2nd year)	9,840	19.68
Maximum	11,340	22.68
Minimum	4,535	9.07
Average	8,380	16.76

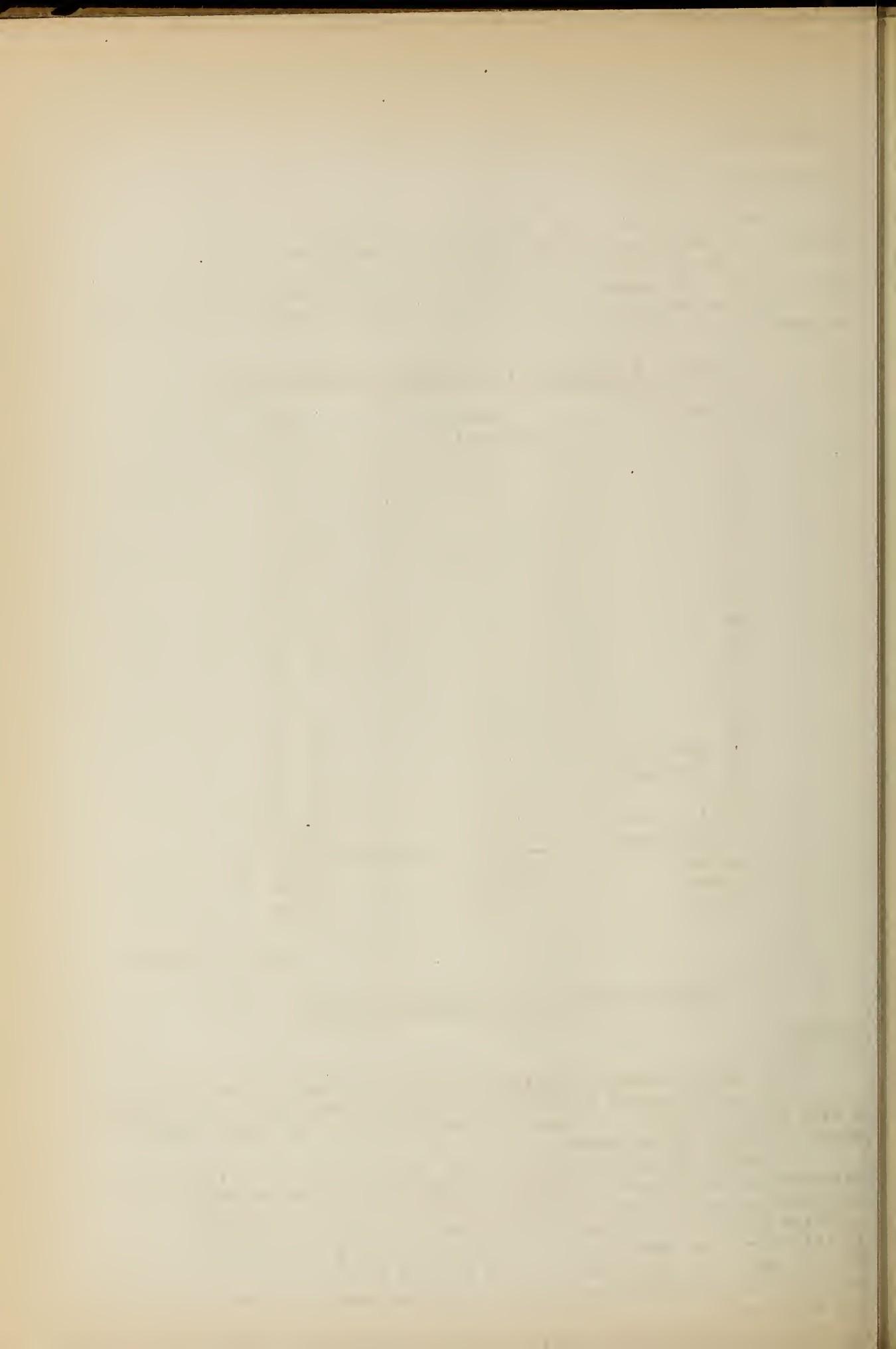
James A. Holden.

Demonstrations on Reclamation Projects.Flathead

Mr. Miller reports as follows for the week ending November 8:

The agriculturist resumed duty status on November 5 at the close of a sick leave. It had been rainy for some time, and the roads were in bad shape for travel by automobile.

A number of conferences were held at Helena while on leave. One was with the Veterinarian in charge of Montana relative to tuberculosis eradication, and the possibility of having the Project recognized as a Modified Area in view of only one-fourth per cent reactors being found in this territory was discussed. Legislation that would permit the creation of such a modified area here is the end sought. Another conference with the State chief of Immigration regarding procedure for Montana Month was also held.



Flathead (continued)

The part of the week on duty was spent in the office checking club work reports, bringing various office reports up to date, giving assistance in supplying barrels for turkey shipments, and locating a purebred bull for a farmer, etc.

Eggs are bringing 50¢ and butterfat 35¢ and 37¢ at collecting station.

A foot of snow fell the first of the week ending November 15 and the weather turned considerably colder. The roads were in fine shape most of the week due to snow filling holes and the cold weather taking care of the mud.

Considerable time was spent in an effort to get all the club reports in. A number of club members are attending high schools at distant points, which makes it rather difficult to get the reports in promptly and necessitates considerable correspondence.

Assistance was given a rancher in selecting three high grade Holstein heifers from a herd on the project and also a purebred young bull to be used in this herd. These are to be purchased through the Agricultural Credit Corporation.

A case of milk fever of very acute form was successfully treated. Barrels were ordered and delivered to several turkey raisers for shipping purposes. Poultry killing knives were also secured and distributed.

The market price for butterfat and eggs is the same as last week.

L. B. Miller.

Minidoka

Mr. Montgomery reports as follows for the week ending November 15:

Returned to duty on the 11th from enjoyable vacation spent in the hills.

One flock of tuberculin fowls was investigated. The owner decided to apply tuberculin test and destroy all reacting birds, the rest to be kept in strict quarantine and retested later in the spring. This decision was made because this has been one of the high producing flocks on the project, and the owner wishes to retain his breeding stock if the flock can be cleaned up.

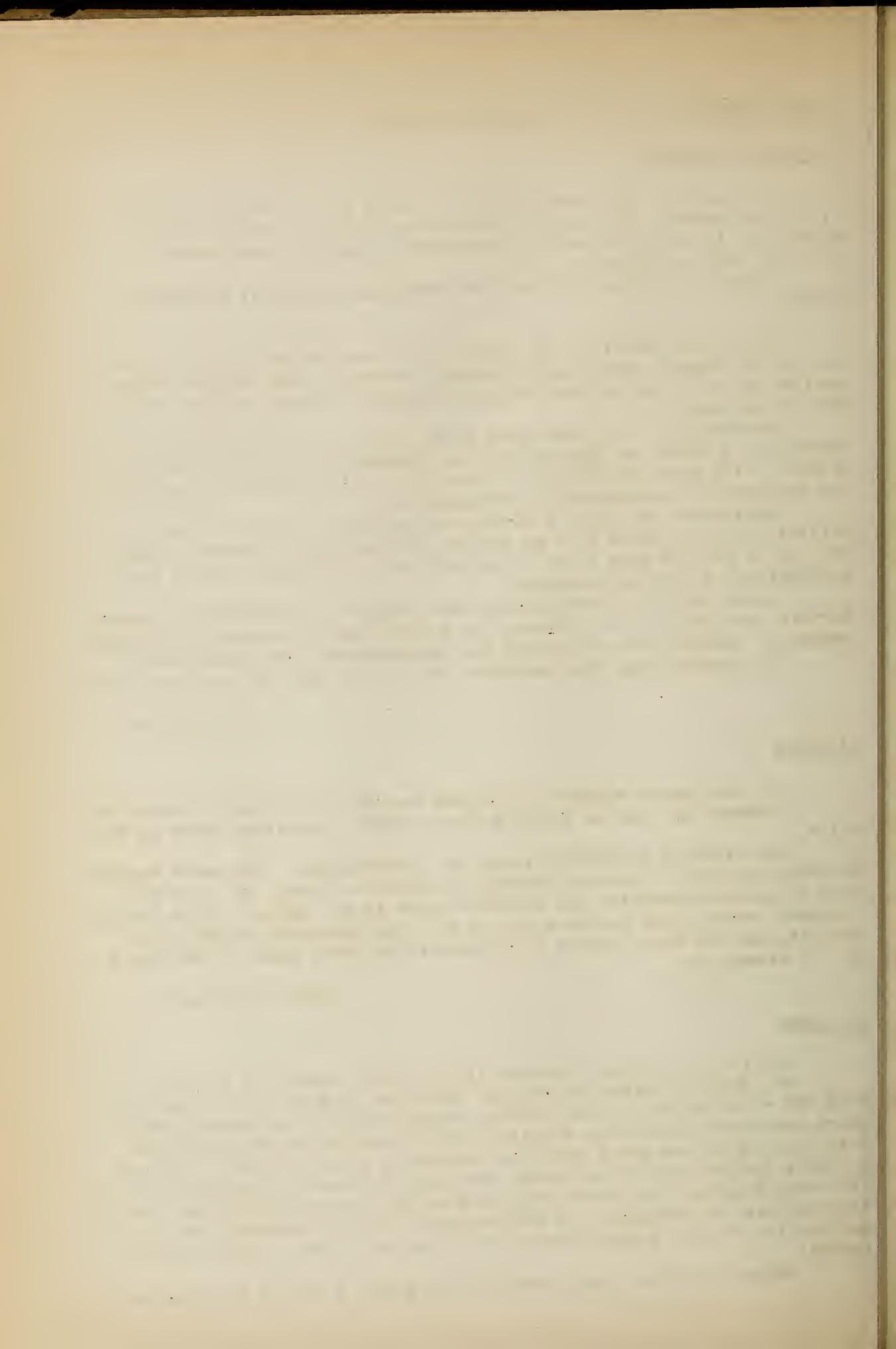
John T. Montgomery.

Newlands

For the week ending November 15 Mr. Cline reports as follows:

The turkey feeding experiment, which has been conducted during the past two weeks on 455 turkeys that are being finished for market, has shown some very interesting results. There seems to be practically no data along this line which has been secured on a large scale. Since the Newlands project farmers are quite extensively engaged in turkey raising, it seemed important to secure some data on the cost of production similar to that which is available for other classes of meat animals. The following are the results secured during the first two weeks of this fattening period:

During this time whole corn and wheat have been fed in about equal



Newlands (continued)

proportions, and without limit. The original weight of the 455 turkeys was 5,251 pounds. After fourteen days the weight had increased to 5,880 pounds, making a net increase of 629 pounds or 1.39 pounds per bird. The total feed eaten during this period amounted to 3,037 pounds. The amount of feed eaten per pound of gain was 4.7 pounds. This figure compares very favorably with the results secured in feeding hogs. The cost of grain per pound gain, with wheat at \$50 per ton and corn at \$60 per ton, amounted to \$12.92 per hundredweight.

It will be interesting to note here the wide spread between the cost per pound for finishing turkeys and their market value as compared with the cost of finishing other meat animals and their market value. The result so far secured is very much in favor of the turkeys.

During this feeding period of the turkeys they have had free access to alfalfa stubble and alfalfa hay, and they seem to have eaten considerable of both, but no charge has been made for this feed in the calculations. During this first feeding period the turkeys ate each day 3.68 pounds of grain for every one hundred pounds live weight. The percent of daily gain, calculated on the basis of the original weight, amounted to .85. These figures so far show very economical results in finishing turkeys. This feeding test will be carried on two or three weeks longer, and the final results will no doubt be of much interest to local growers, who have had no definite knowledge heretofore as to the cost of finishing their turkey crop.

L. E. Cline.

North Platte

The greater part of the week ending November 15 was devoted to the cooperative shipment of two carloads of dressed turkeys from Torrington, working in cooperation with county agent Dupertuis. The farmers dressed and brought in 4000 turkeys, some of them bringing in as few as 10 and others as many as 150. Swift & Company, who bought the turkeys, paid the farmers a total of more than \$12,000.

The undertaking was very successful. The farmers not only received between two and three thousand dollars more money for their turkeys than they could have gotten from local dealers, but they also learned a great deal about marketing turkeys, especially cooperative marketing. If the market is good at Christmas, more turkeys will be shipped at that time.

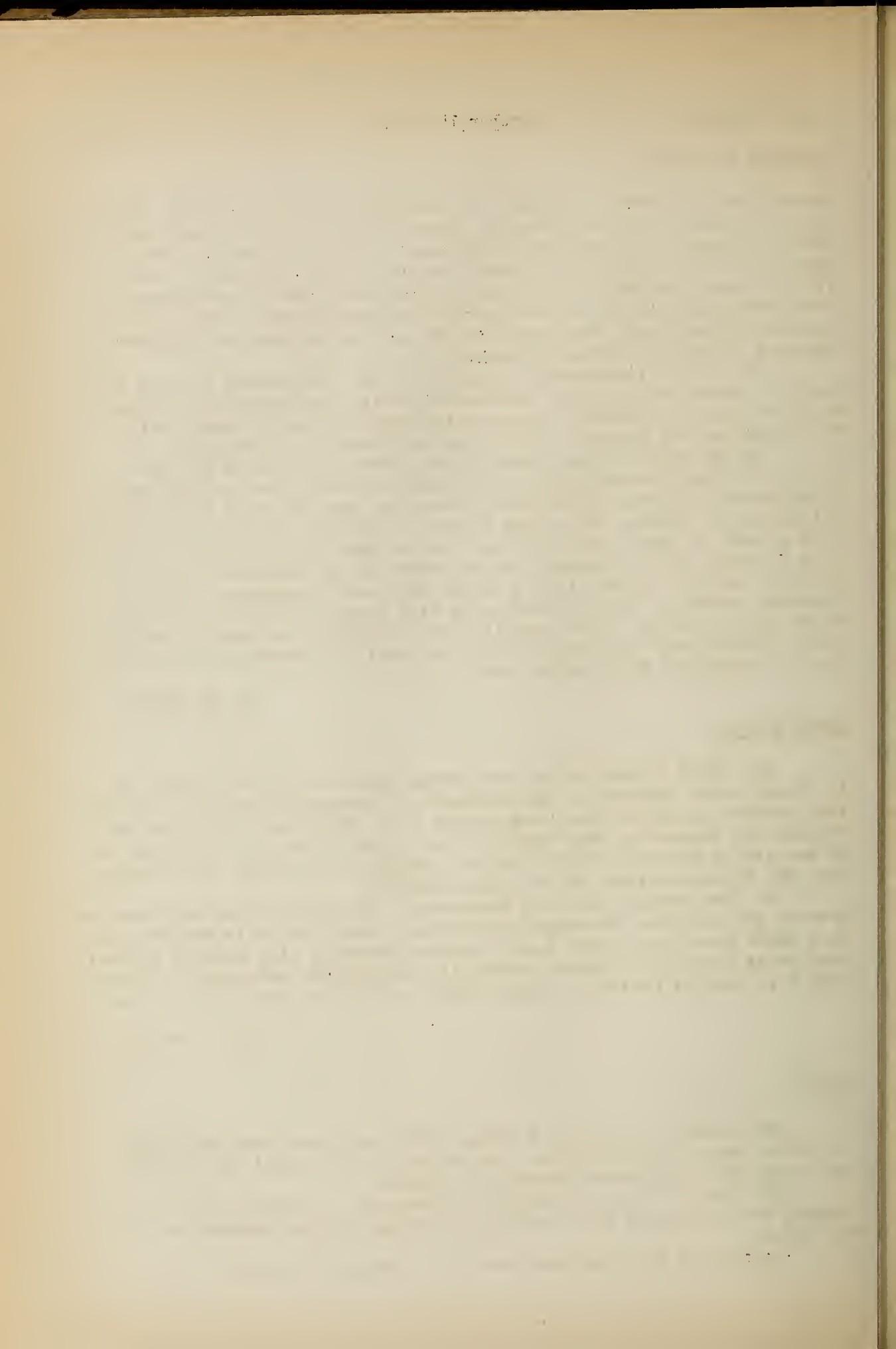
D. H. Proops.

Shoshone

The weather for the week ending November 15 was cold and windy, but there was no precipitation. Ranches are getting short of water and some sheep are being moved toward the Project.

Mr. Thos. W. Moseley visited the Project on Monday and Tuesday to inspect the Government bulls and make arrangements for placing another one here.

Government veterinarians have been testing the cattle on the

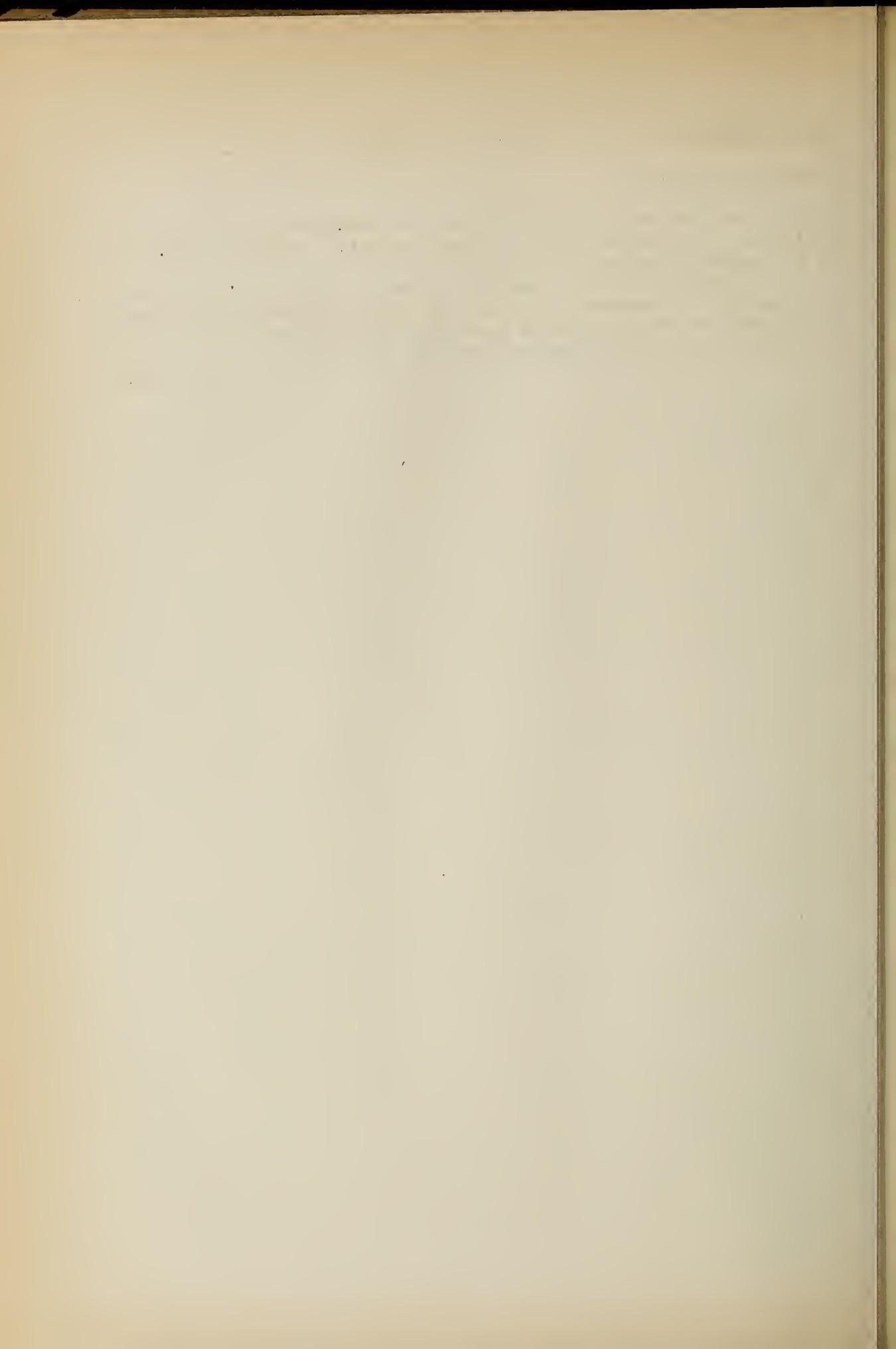


Shoshone (continued)

Frannie division for tuberculosis, and will probably complete their work next week. No reactors have been found to date. Work will be started on the Garland division in January.

I attended the dispersal of the largest dairy herd on the Project last Monday. The cows were not in very good flesh and brought from \$35 to \$65 with an average of less than \$50. The older cows were purchased four years ago at prices ranging from \$80 to \$120.

O. J. Grace



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Demonstrations on Reclamation Projects.

Belle Fourche

Sheep dipping for scabies was continued through the week ending November 22. With the exception of one flock all the sheep that are scheduled to be dipped have received the two dippings required. It is estimated that 30,000 head have been dipped in the past five weeks with either the lime-sulphur or nicotine-sulphate dips. The dippings were closely supervised by two veterinarians.

Much of the agriculturist's time during the week was used in placing a carload of registered Ayrshire cattle that arrived on the project from Hot Springs on Tuesday. This carload consisted of nine heifer calves, three senior yearlings, ten heifers from two to three years old, five cows, and four bulls. Of the 31 head shipped in, the club members will take 18 and progressive dairymen the remaining 13. Mr. C. F. Hall of Hot Springs, who shipped the cattle in, is financing many of the purchasers as well as our local banks. Mr. Hall was short of feed this fall and was glad to dispose of cattle from his herd at attractive prices to buyers here. Calves were sold for from \$45 to \$75 and bred heifers and cows brought from \$100 to \$125. All the cattle shipped in should make high quality milk stock, as they show strong dairy temperament. Most of the cattle were a little thin from being on short feed since summer.

The Ayrshire Club held a basket sale and entertainment at the Webb school house on Saturday evening. Nearly all the members of the club participated in the program. The sale of baskets brought \$38 into the club treasury.

Frank E. Miller.

Flathead

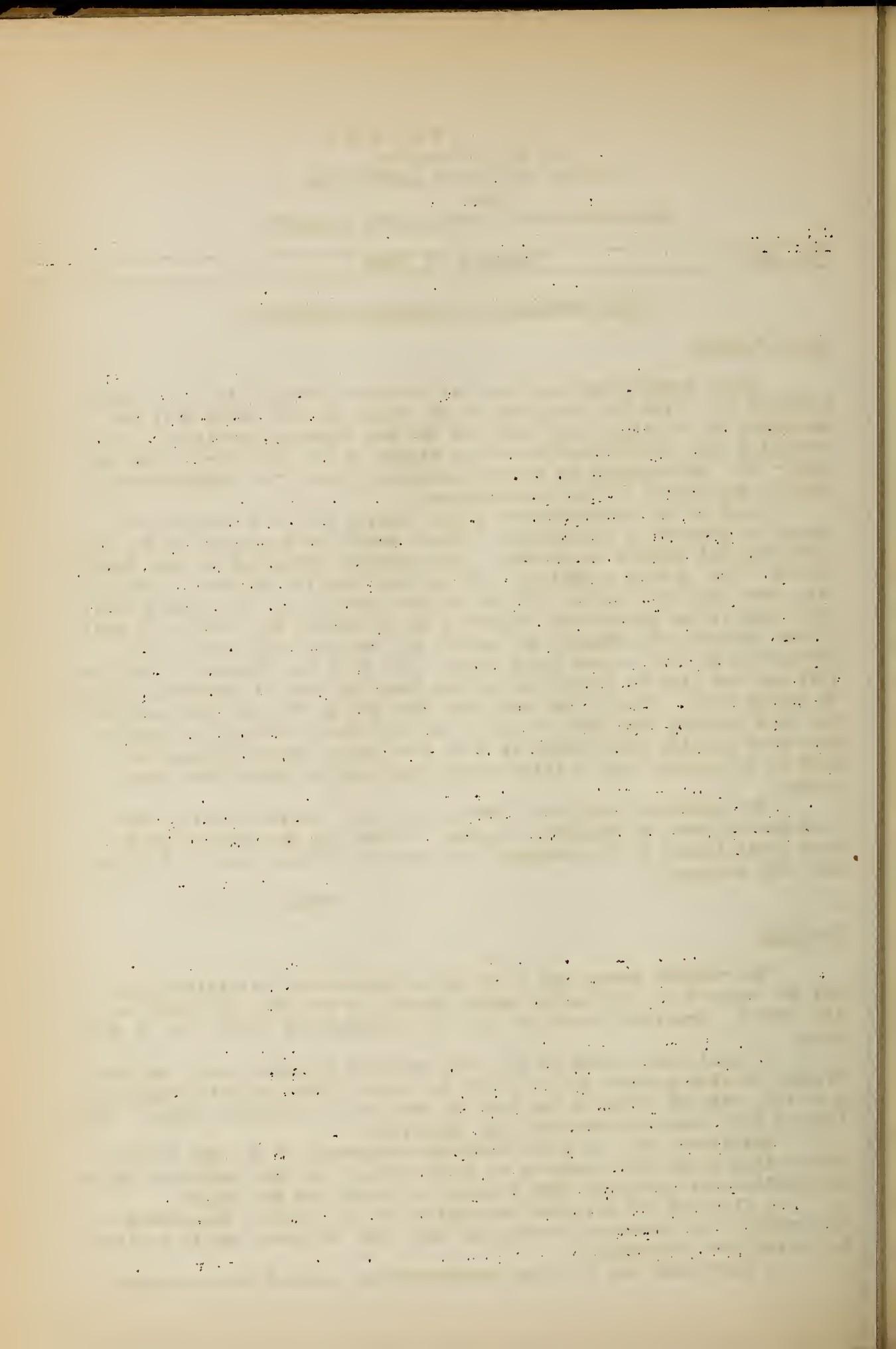
The weather during the week ending November 22 was fairly mild, but the roads were very muddy, making travel by car very difficult on side roads. Practically all the snow had disappeared by the end of the week.

A considerable part of the week was used in making calls on and writing to club members in an effort to get all final reports completed. A meeting with 18 children was held in connection with this matter. Club leaders were also interviewed along this line.

Assistance was given the secretary-treasurer of the Cow Testing Association in checking records of first tester, and the president of the Association was conferred with relative to plans for the future.

A flock of 100 chickens was culled and the process demonstrated. Suggestions for improving housing and care were offered, and 14 poultry bulletins were distributed.

A conference was held and correspondence entered into regarding



Flathead (continued)

the completion of tuberculin testing in a small valley where the range stock had been turned out by the time the veterinarian was able to reach the territory.

A considerable number of office calls for advice and suggestions on sheep and dairy cattle were made.

Butterfat is 36 and 38 cents at local station, eggs 50 cents.

L. B. Miller.

Minidoka

Six dairy herds were sold during the week ending November 22. Most of the agriculturist's time was spent in assisting farmers in selecting cows to add to their herds in an effort to prevent their leaving the project.

Some cases of impaction, which seem to be due to improper feeding, are reported from several farms. Where feeding methods have been changed as suggested, favorable reports have been made.

The farmers' wool pool officers have received good bids for next year's clip on a contract with an advance to the growers. Not enough of them have signed the contracts to make this advance available at this time.

Six farmers have asked the agriculturist to locate breeding ewes for them, which has been done.

The agriculturist has made some effort to induce farmers who are able to handle them to keep farm flocks, with almost too good success. A number of them wish to cut down on their dairy herds and take up sheep.

A number of inquiries for farms have come to the agriculturist from tenants who wish to secure farms on which they may keep more stock.

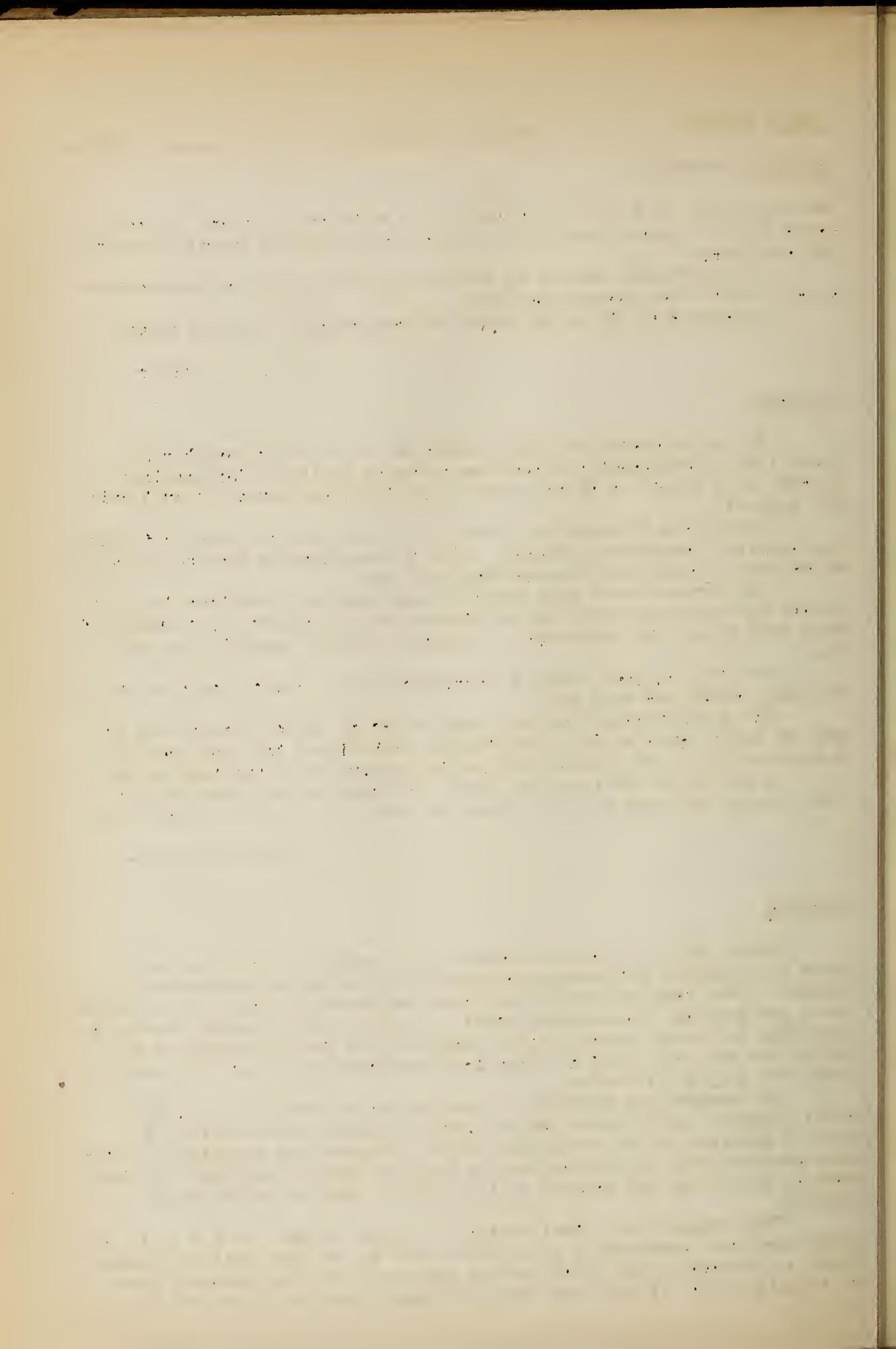
John T. Montgomery.

Newlands

During the week ending November 22 considerable time has been given to compiling information along dairy lines for the Paramount Cream Company. This firm is looking over this project with a view to establishing a new process cream canning plant. Agents of this concern have been surveying the cream supply and the possibilities for the future of this Valley for some time, and they now look upon this Valley as a favorable place for this new industry.

The proposition provides for canning cream for table use, ice cream purposes, and whipping cream, and also canning whole milk. The process consists of emulsification of the butterfat and sterilizing under high pressure with lower temperatures than are usually applied. By this process they claim the product is less altered than by other canning methods.

This proposed new plant claims to be able to pay about 4 cents per pound more for butterfat in sweet cream than the regular butterfat price which is maintained for butter-making purposes. If this proposed plant is finally built, it will mean much for local dairymen in the way of



Newlands (continued)

butterfat prices.

The past week has been a very busy one with the turkey growers. On Saturday one carload of dressed turkeys was shipped out. Two other carloads are expected to go out before Thanksgiving. Up to date about sixty tons have been marketed. This covers a period from November 1. The local growers have been marketing their crop from the time the birds got in prime condition. Some of the best prices were received early in November.

L. E. Cline

Shoshone

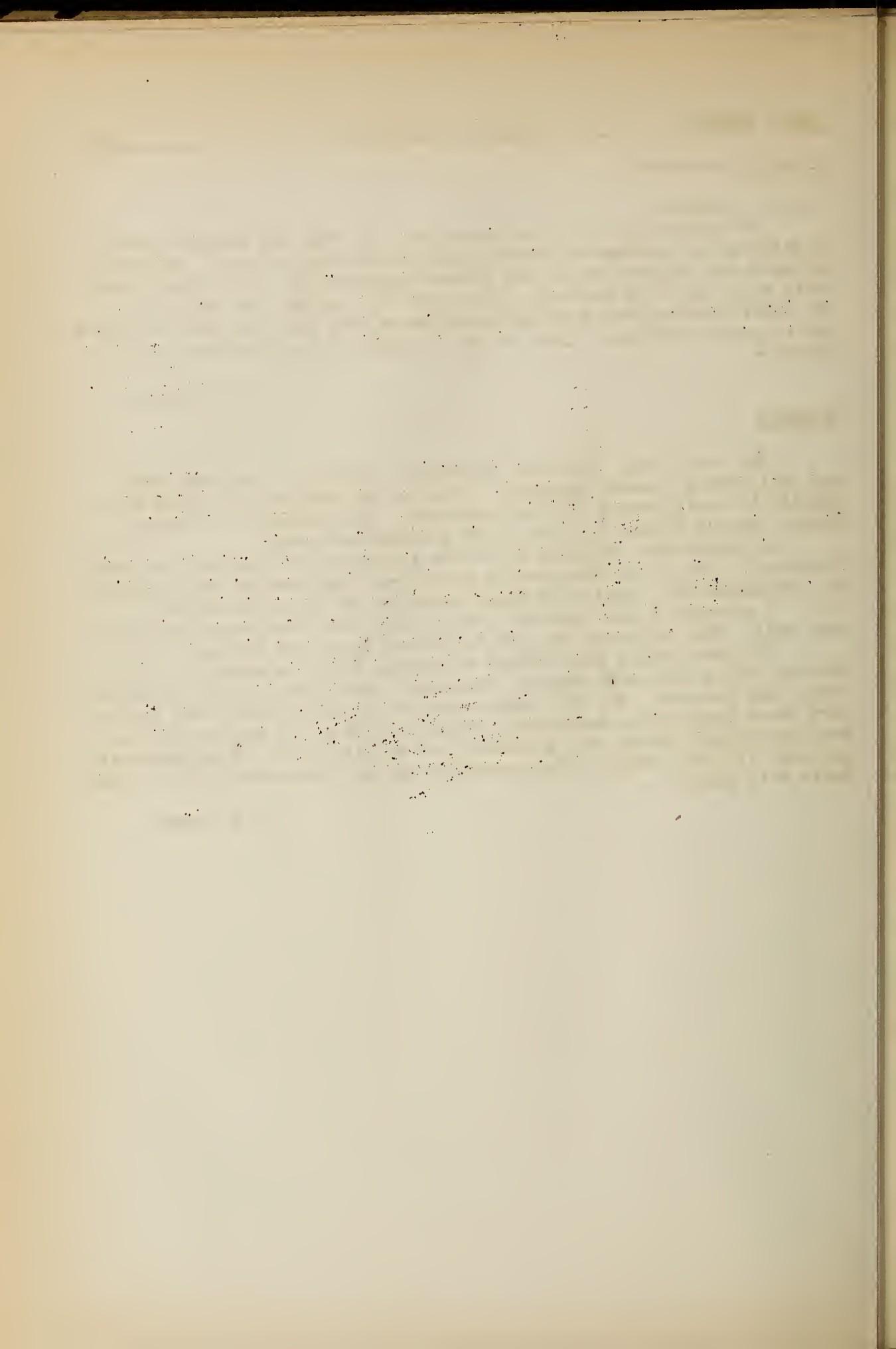
The week ending November 22 has been favorable for farm work and fall work is nearly finished. Some hay is being baled, but a comparatively small amount is being marketed. Some potatoes are being loaded, buyers paying \$1.00 to \$1.05 per hundredweight.

A cooperative shipment of cattle and sheep will probably be made December 9. There are two cars of cattle and four cars of sheep listed. This shipment will consist of stock consigned by about 40 farmers.

I attended a sale this week where nine very good grade Holsteins were sold. The top price was \$79 for a good four year old cow.

The Park County Farm Bureau Federation held its annual meeting at the Sage Creek Community Club on Thursday. About 200 farmers and their wives were present. The Farm Bureau members are affiliated with the Big Horn Basin Cooperative Marketing Association, which is selling for its members poultry, beans, sweet clover, and alfalfa seed. This Association has sold \$135,000 worth of farm products for the farmers of the Big Horn Basin this year.

O. J. Grace.



W E E K L Y R E P O R T S
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Vol. XXV

November 29, 1924

22

Western Irrigation Agriculture

Newlands

The meteorological data recorded at this station for the period November 10 to November 29 follows: Mean maximum 51.8, maximum 68 on November 20; mean minimum 19.9, minimum 12 on November 29. No rainfall was recorded during the period.

The work at the station consisted of manuring the lawns, garden, and pasture. The manure is being hauled from town, making it rather slow work for the teamster. The premises have been cleared of leaves, etc. and placed in condition for the winter. One man's time has been devoted to cleaning the irrigation ditches of weeds and brush.

Much of the laboratory work has been the usual routine of analyzing soils and waters. Some work has been done in determining the replaceable bases in various types of soils.

E. W. Knight

San Antonio

The following meteorological data were recorded at the San Antonio Experiment Farm for the two weeks ending November 29: Temperatures, maximum 86, minimum 26, greatest daily range 44; precipitation, trace; sky, fourteen days clear. The total precipitation recorded to date since June 22 is 2.39 inches. With the exception of one rain on September 12 of 1.98 inches, this amount is made up of widely scattered, local showers, which were not of sufficient size to be of value. There has been no pasture available for some time, and plowing is becoming very difficult.

The first killing frost of the season occurred the night of November 24, when the temperature dropped to 26 degrees, killing tender truck crops and cotton which had not been previously destroyed. This is six days later than the average first frost during the past 17 years. The last killing frost in the spring occurred the night of March 13. This gives a frost-free period during the 1924 season of 256 days, as compared with 258 days as the average for the period from 1907 to 1923 inclusive.

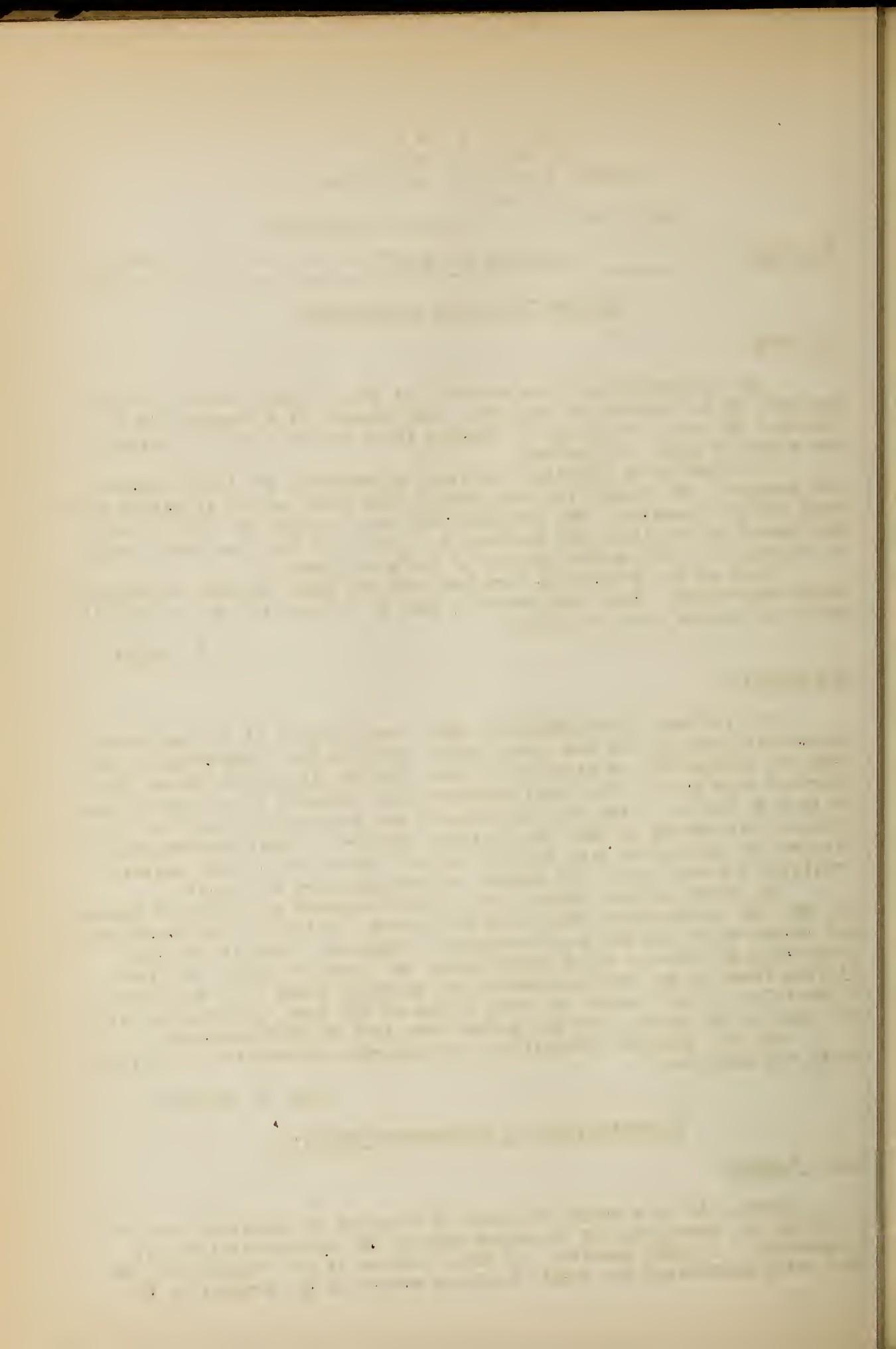
All fall plowing, subsoiling, and manuring of rotation and tillage plats was completed.

Geo. T. Ratliffe

Demonstrations on Reclamation Projects

Belle Fourche

During the week ending November 29 a number of inquiries were made regarding the purchasing of livestock through the Agricultural Credit Corporation. A local committee of three members is now functioning, so that stock contracted for should begin to arrive on the project by the



Belle Fourche (continued)

first of the year.

Superintendent Aune of the Experiment Farm placed the third bull from the Ardmore Station on a farm in the Vale community. Milk tests were run for three farmers, and four applications for tuberculin testing were signed up.

Sheep scab inspection and dipping consumed an entire day. Two vats will begin dipping the first of the week.

Frank E. Miller

Flathead

During the week ending November 29 a flock of 319 chickens was culled and the procedure demonstrated. Suggestions were offered regarding poultry house remodeling. One hundred and forty-one hens were culled out of one flock. Assistance was given in planning poultry house for a man wanting to start in poultry raising.

A conference was held regarding tuberculin testing not completed last summer due to cattle being on range. Several calls were received for advice and information regarding contemplated sheep meetings on the project.

Cow tester was given some time in conference regarding the conduct of work and plans for advertising campaign preceding the reorganization meeting. Calls for assistance in cases of obstructed teats, freshening, and testing of cream samples were answered.

Final check on club reports were made and mailed to the State Leader of club work. A letter was written to each club member reporting.

Eggs remain at 50 cents and butterfat at 37 cents and 39 cents at collecting station in Ronan.

L. B. Miller

Minidoka

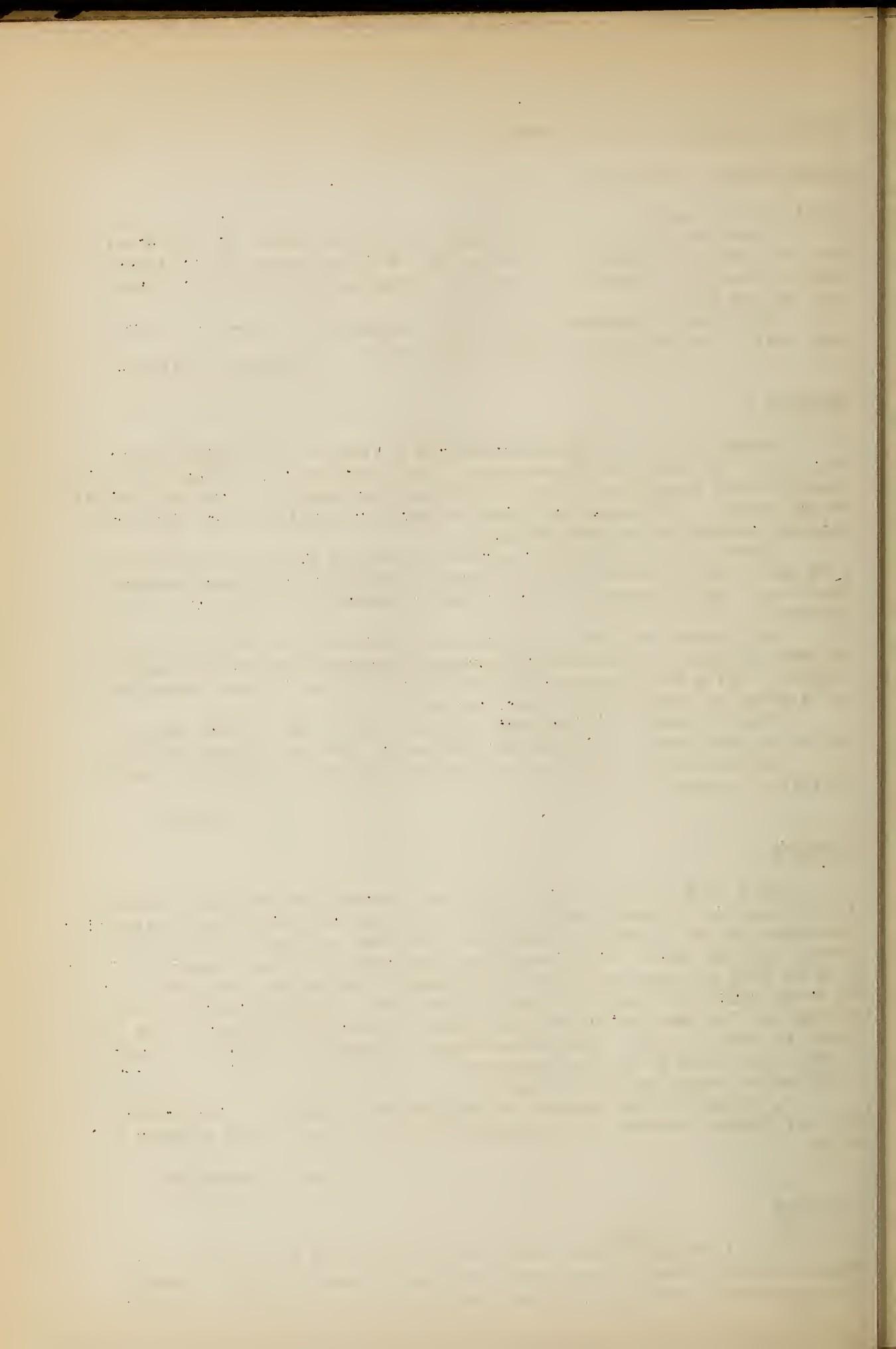
Most of the time of the week ending November 29 was spent assisting farmers in selecting dairy cattle to add to their herds and inspecting some herds on the North Side Twin Falls Project, on which indebtedness is likely to cause sale. The demand for good cows continues. Grades sell as high as \$125 for exceptionally good milkers, that is cows that will give 45 to 50 pounds of four per cent milk or better. Common cows of nondescript breeding are not in as much demand and are selling for \$45 to \$60. There is still a demand for purebred cows, particularly Holstein breed, if they are known to be good producers. Otherwise they sell on a parity with grades, which is as it should be.

A number of farm visits were made at the request of farmers to suggest feeding rations and help solve matters of management of cows and pigs.

John T. Montgomery

Newlands

The first part of the week ending November 29 was spent in San Francisco and Oakland investigating the turkey market. While visiting the commission districts in these cities, some very favorable comment



Newlands (continued)

was made on the Newlands Project turkeys. Well-finished turkeys were in good demand, and Fallon turkeys were at a great advantage this year because of the large supply of poorly finished birds from the drouth-stricken districts of California. The wholesale price for good stock reached 40 cents for young hens, and 42 cents for young gobblers, before the market closed for Thanksgiving Day.

The item of special interest, however, was the greatly increased period over which turkeys are eaten now as compared with former years. The wholesale merchants say they have a steady demand for turkeys from the time the first ones are available in the fall until warm weather comes again. This lengthening of the consuming period is a great boon to the turkey industry. It makes possible a more orderly marketing of the crop and secures more certain profitable returns to the grower.

This office for the past two years has been advising local growers to start in and market their crop as early as the birds are suitable, and the results have been very satisfactory.

During the week one carload of fat hogs was assembled and sold f.o.b. Fallon. Nineteen shippers took part in these cooperative shipments and consigned 112 hogs. The prices received at Fallon were 9½ cents for prime hogs, 6½ cents for big sows, and other hogs according to grade. This shipment was very satisfactory, and the prices amounted to about one cent per pound more than paid by local concerns. The next cooperative shipment will be assembled about the middle of December, and it is hoped to make a sale similar to the one just made.

L. E. Cline

North Platte

During the first part of the week ending November 22 a local poultry organization was completed. The name of the new organization is the South Sioux Poultry Association. Officers were elected and committee appointed Monday evening. The first venture of the association will be to market cooperatively a carload of dressed turkeys for the Christmas market.

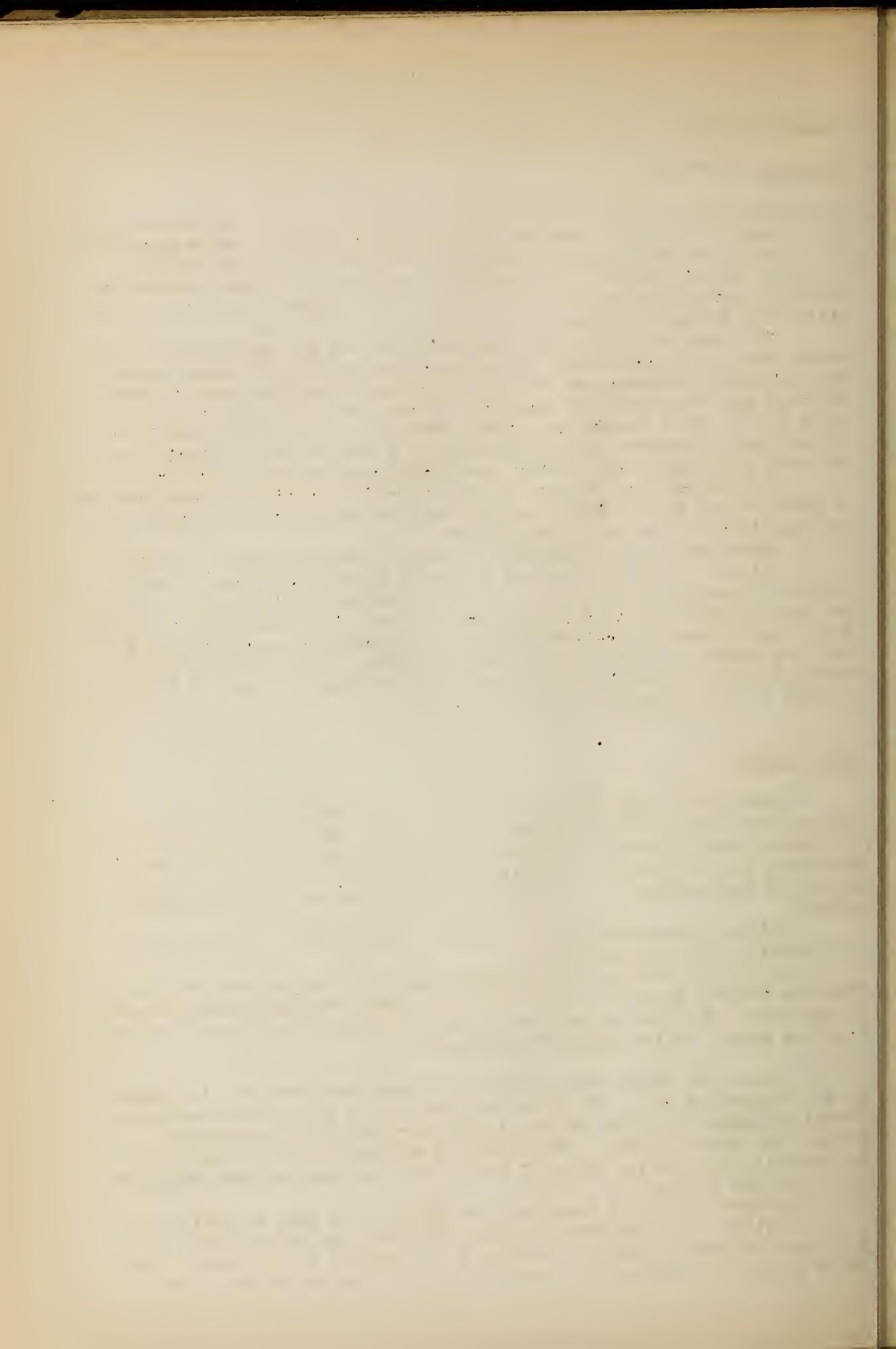
Culling demonstrations were held on three farms. About 300 hens were handled and 40 culled out.

One of the Experiment Farm bulls loaned to farmers was transferred from one club to another. The year for the bull club work begins December 1 each year. The plan is to have the association bulls that are due for a change placed by the first of next month.

Part of the week ending November 29 was spent with the livestock at the Experiment Farm. The hogs were taken from their summer quarters, sorted and placed in lots for feeding tests which will be conducted through the winter months. The nature of the hog-feeding tests will be to determine the feeding value of both cooked and raw potatoes compared with corn and barley.

Another Experiment Farm bull was placed in a club at Fort Laramie.

A little time the latter part of the week was spent with a representative of Swift & Company, who was in the valley to bid on a few car-loads of dressed turkeys to be shipped to the Atlantic coast for the



North Platte (continued)

Christmas trade. The turkeys are to be dressed and sold cooperatively by the growers. Present indications are that at least two and possibly three cars will be sold in this way.

D. H. Proops

Shoshone

The week ending November 29 has been seasonable weather with a light fall of snow on Sunday and Tuesday night. Moderate temperatures with very little wind have prevailed.

Milk samples from four herds using the Government bulls were collected and tested Wednesday.

Returns from the cooperative shipment of wool made in June were received and assistance given the Bank in prorating the proceeds. The wool averaged 44 cents net to the grower.

O. J. Grace

Uncompahgre

Three flocks of poultry were culled during the week ending November 29. Two of these were flocks on which records of cost, production, and receipts will be kept for the year beginning with December 1 and which the owners wanted culled before the records were started. Records will be kept on twenty-seven farms on special forms provided by the Extension Office, and most of these were visited this week and the week preceding to explain the records.

Two visits were made to Delta in connection with the premium list for the poultry show, which has been given to the printer.

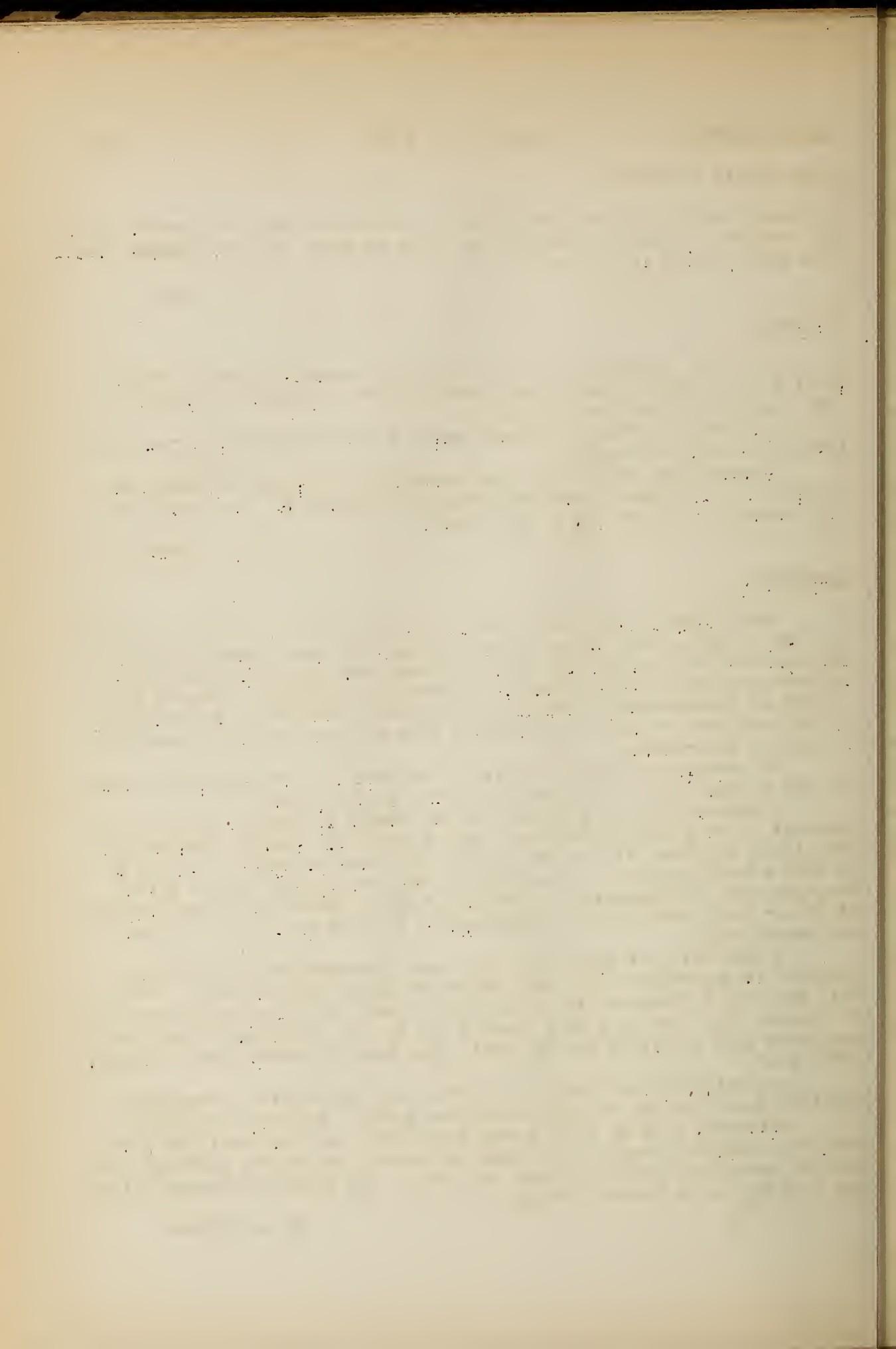
A number of men met in this office Friday to discuss the proposed shipment of ewes into the valley. Only 50 head are listed. Unless more are listed the plan will be given up, as the freight would be too high on such a small number. A bunch of 900 old ewes on feed at the Delta Sugar Factory was inspected. A choice of 200 of these is offered for sale at \$9 per head, but they seem unreasonably high at that price and were not recommended.

A farm sale, at which some very good livestock was offered, was attended at the request of a man wishing to buy a Holstein bull. The one bull sold was a two-year old, a good individual, well bred and registered. He brought \$31. The best cows brought \$50 to \$60. High grade bred two-year olds sold at \$17.50 to \$30, while four head of heifer calves brought \$24 a head.

A yearling Jersey bull of good breeding was received from Grand Junction this week for the bull club near Delta. The price was \$100.

Butterfat went up to 41 cents this week. Eggs are still 50 cents. Hogs have remained around \$9 for tops at Denver, and cattle at \$8.50 for tops of grass beef being received at Denver. Fat lambs are around \$13.50, and feeders are as high as \$14.25.

H. A. Ireland



W E E K L Y R E P O R T S
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December 6, 1924

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Demonstrations on Reclamation Projects.

Belle Fourche

Three days of the week ending December 6 were spent on sheep dipping and inspection work. Nearly five thousand head of sheep were dipped for scab. None of these sheep showed any symptoms of scab. However, they had been exposed to scab and the dipping was a precautionary measure.

Half of the week was spent in securing signers to contracts for beet acreage. The Holly Sugar Company has agreed to erect a sugar refinery in the Belle Fourche Valley in time for the 1925 beet crop if the farmers of the county and the project will sign up for a total of 8,000 acres of sugar beets. The reports on Saturday evening showed a little over 7,000 acres signed up.

Two community meetings were attended during the week. At both meetings the sugar-beet question was up for a lively discussion. The Project Ayrshire Club held its regular monthly meeting Saturday afternoon, at which time officers for the coming year were elected and new members admitted to the club. This club will start the year with 27 members owning 32 head of registered Ayrshires.

F. E. Miller.

Flathead

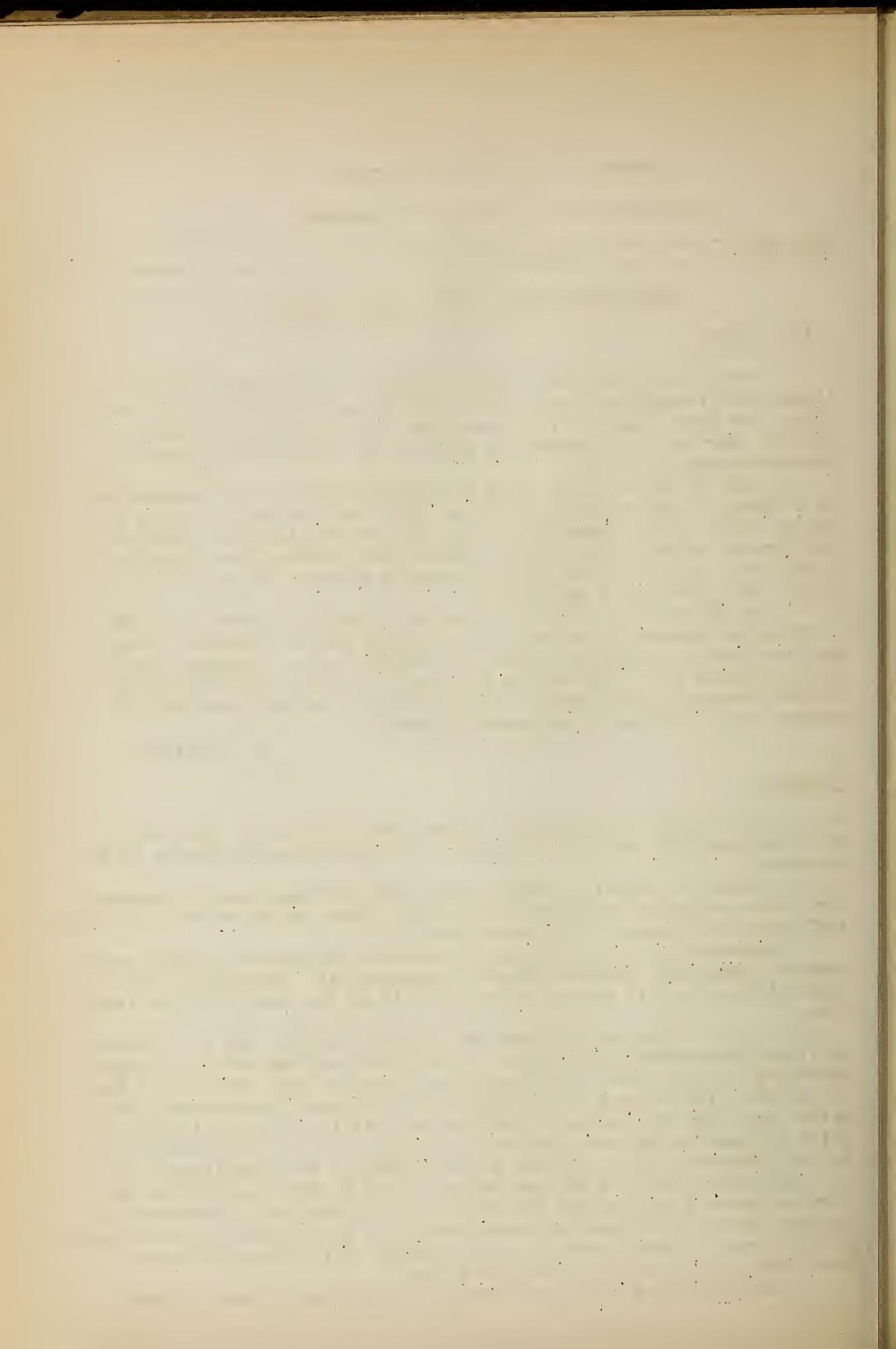
The weather was fairly cold most of the week ending December 6. The roads are very rough. Some snow fell and considerable cloudy weather prevailed.

Weekly and monthly reports, along with the usual run of vouchers, were given attention the first of the week. Three press articles totaling 1500 words were prepared and distributed.

Considerable time was spent in scouting for suitable office quarters and attempting to make agreeable arrangements. This action is necessary because an oil station is to be built on the present office location.

A very enthusiastic, peppy and timely meeting of the Lake County Affiliated Organizations was held on Wednesday; and the matter of appropriations for the Flathead was acted upon, news of same arriving on day of meeting. Other items of business were: a gopher extermination campaign; emergency legislation permitting the killing of muskrats or irrigated projects in order to protect the ditches and dams; interesting the Federal Government to cooperate with the State in the establishment of an experimental farm for the project on the State farm near Charlo; membership drive; herd district and other farm legislation; resolutions to Congress on the appropriation recommended, and to railroads on the adjustment of freight rates westward. Mr. Campbell, Chief State Division of Land Settlement, was the speaker of the day.

Assistance was given in locating and selecting a herd of three



Flathead (continued)

purebred and seven grade Holstein cows for Mr. Holzer of St. Ignatius. A herd from the Cow Testing Association was secured. Finances were arranged through the Credit Corporation.

A Holstein Breeders' meeting was held to get the dairymen's viewpoints, at which Senator Lyle and Mr. Campbell were presented.

A considerable number of office calls were given attention.

Butterfat is 40 and 42 cents locally, eggs 60 cents.

L. B. Miller.

Minidoka

Sales of hay aggregating over 20,000 tons were made at \$10 per ton during the week ending December 6. Some sheep men who had not come to the project for several years have bought their hay and are returning to the project this year for the lambing season.

A tuberculin test of a flock of 150 hens caught 31 reactors. A post-mortem of fine-looking birds in laying condition revealed characteristic lesions in liver and spleen. Of the 31 reactors probably six or seven would have been culled as unprofitable hens. The others had all the physical appearance of being profitable birds.

The dairy situation remains about the same. Two sales of cattle, one purebred and one grade, brought steady prices. A good purebred cow topped the sale at \$150. Now that the alfalfa hay price has been established at \$10, which is considerably lower than some men anticipated taking, the dairy situation should improve.

J. T. Montgomery.

Newlands

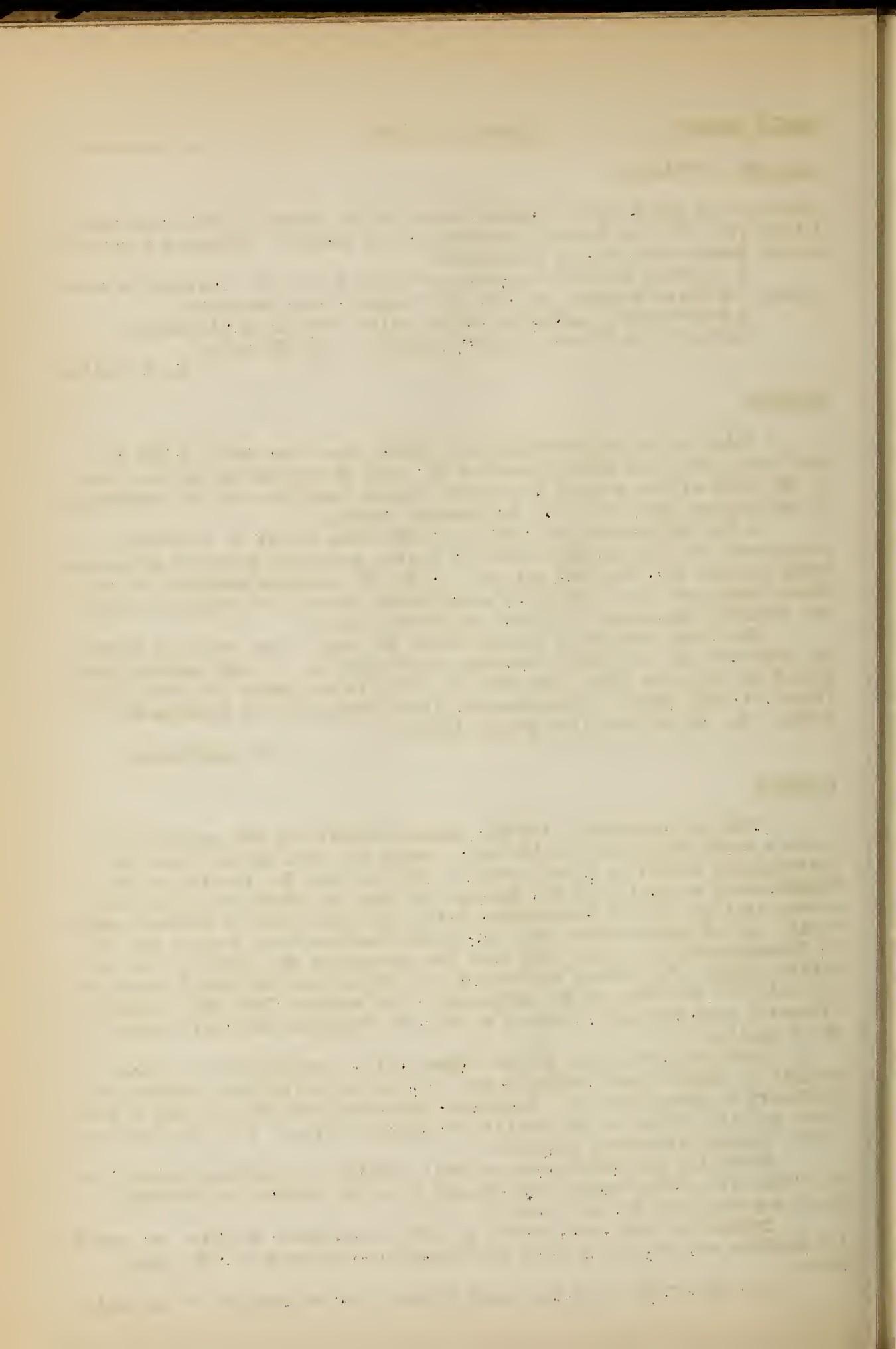
Work in connection with the turkey industry on the project has taken a large proportion of the time during the week ending December 6. Considerable effort is being given to interpreting the results of the Thanksgiving marketing of the turkeys, so that the Christmas marketing season will be entered into with a better understanding of market requirements. About seventy-five tons of dressed turkeys were shipped out up to Thanksgiving time, and with very few exceptions the returns were very satisfactory. The prices received net at Fallon ranged from 31 cents to 35 cents for the bulk of the shipments. The turkeys from this district attracted very favorable comment in the San Francisco markets because of their quality.

Early this week one jobbing firm sent a representative to this project to spend a week visiting the growers and soliciting further consignments to their concern. Constant propaganda from this office has no doubt had its effect on the quality of turkeys shipped into the San Francisco district from this section.

Work with the turkey growers will continue for another month. By this time all of the turkey crop should be on the market and breeding stock selected for the new year.

During the week one article of 1200 words along the line of marketing turkeys and feeding turkeys for market was prepared for the local press.

One day of the week was spent in Reno for the purpose of investig-



Newlands (continued)

ating a herd of dairy cows offered for sale in that vicinity for a local rancher.

L. E. Cline.

North Platte

On Monday of the week ending December 6 Swift & Company bought of the growers a carload of dressed turkeys to be delivered at Henry and two carloads to be delivered at Torrington. The cars were loaded Friday and Saturday and were to be shipped to the Atlantic coast the following Monday.

Considerable soliciting was necessary to list the turkeys, and a number of killing demonstrations were given so that everyone who sold turkeys might have an opportunity to learn how to deliver them in good condition. County Agent Dupertuis handled the work in Goshen county, and the marketing committee of the South Sioux Poultry Association assisted in Sioux and Scottsbluff counties.

This shipment makes five carloads of dressed turkeys that the farmers have shipped cooperatively from the Valley this season. The plan is entirely satisfactory, and the growers who listed turkeys are planning to market their entire crop this way next year. The turkeys are sold to the best bidder, price, responsibility, and manner of grading considered. The buyer furnishes the barrels and does the packing. The grower sees his turkeys graded and weighed and receives his check as soon as they are weighed; and he realizes for the turkeys dressed from 50 cents to a dollar ^{each} more than he would get if he sold them alive.

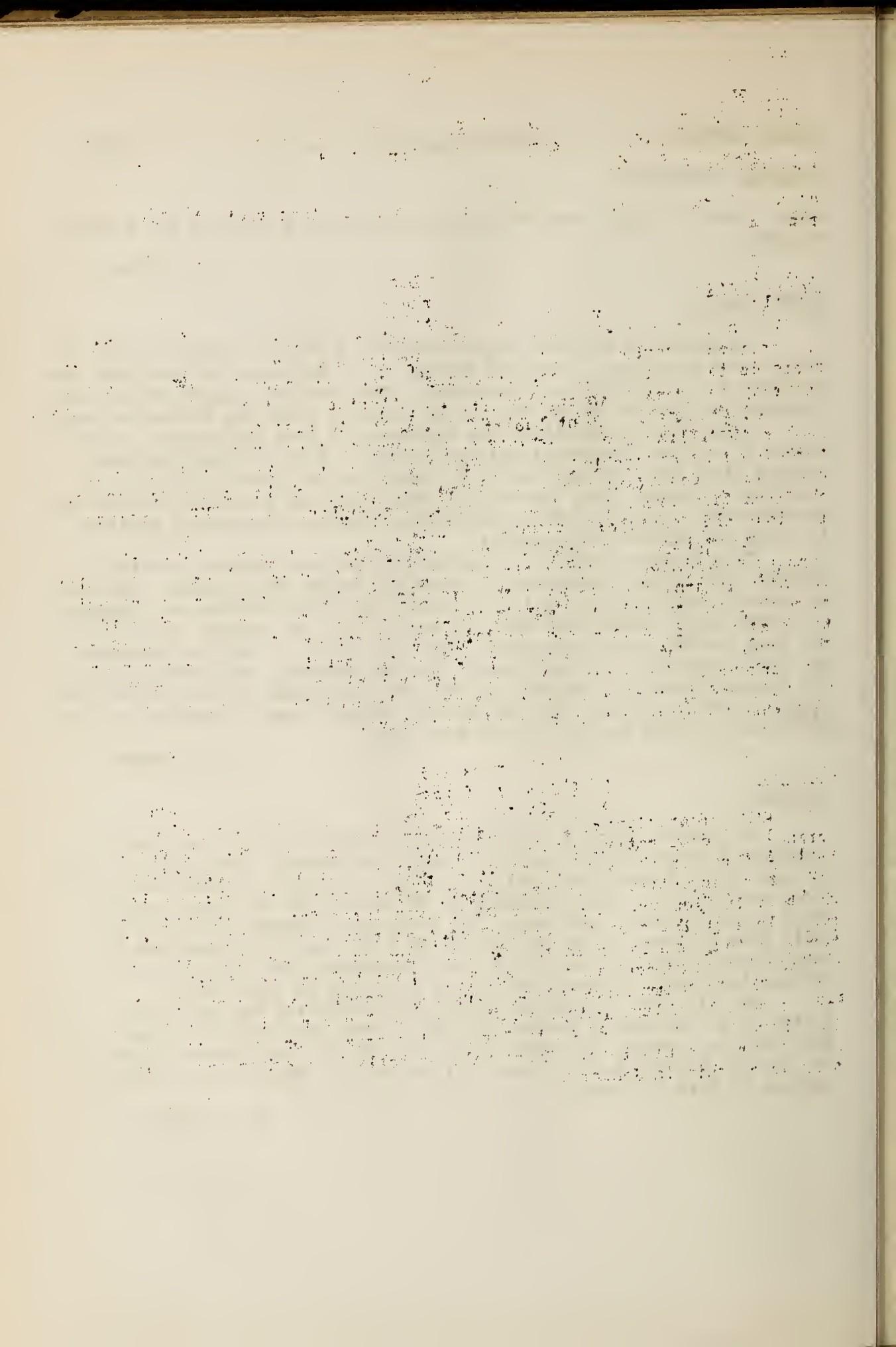
D. H. Propps.

Shoshone

The greater part of the week ending December 6 has been spent in arranging a cooperative shipment of cattle and sheep. Three cars of cattle and three of sheep are listed and will be shipped on December 9. The three cars of cattle are consigned by 36 farmers and the three cars of sheep by 16 farmers. Assistance was given three farmers in buying the small lots of lambs on the project so that they can be shipped out by three or four men later in the winter. Assistance was also given in culling two flocks of hens; there were about 150 in each flock.

The Big Horn Cooperative Marketing Association and one local dealer have been buying turkeys this week. Two cars will be shipped. They have been paying 28 cents for No. 1's dressed or 20 cents alive. No. 2's are 9 cents less. There will probably be another car of late turkeys to ship in January.

O. J. Grace.



W E E K L Y R E P O R T S
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Western Irrigation Agriculture.

Scottsbluff

The average maximum temperature for the week ending December 13 was 37, with a maximum of 60 on the 13th; the average minimum was 11, with a minimum of -3 on the morning of the 9th. There was a light snow of about an inch containing .07 inch moisture.

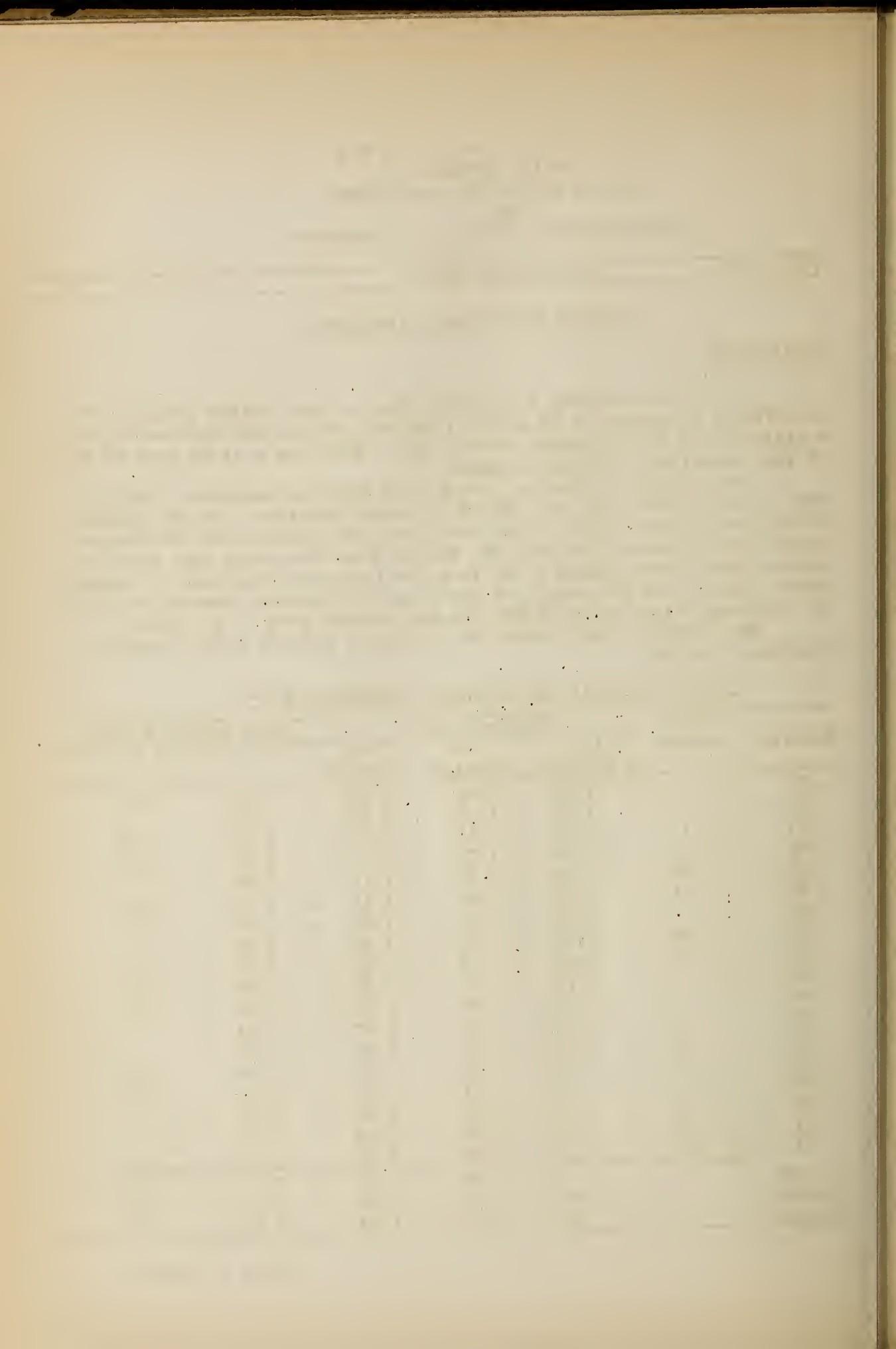
The filling of Silo No. 3 with beet tops was completed. The hogs were sorted, weighed up, and placed in winter quarters, and the various feeding tests were begun. There have been some losses among the experimental lots of lambs, and over the Valley there have been some cases of serious losses from diseases and in a few instances from dogs. A considerable increase in the number of lambs on feed in this district is noted, the estimate being around 60,000 for the western part of the State.

The following table shows the yields of alfalfa in the irrigated rotations for 1924.

Yields of Alfalfa in Irrigated Rotations, 1924.

Rotation	number	Plat	Tons per acre			Total tons per acre	
		1st ; cutting	2nd ; cutting	3rd ; cutting	Per plat	Per rotation	
65	:	1.22	1.49	1.30	4.01	4.01	
61	:	10	1.93	1.55	1.80	5.28	
61	:	11	2.81	1.66	1.50	5.97	5.62
40	:		1.86	1.71	1.72	5.29	5.29
60	:	10	1.76	1.33	1.16	4.25	
60	:	11	2.43	1.41	1.14	4.98	4.61
42	:		1.76	1.58	1.68	5.02	5.02
62	:	10	1.49	1.22	1.28	3.99	
62	:	11	2.50	1.63	1.50	5.63	4.81
44	:		1.12	1.28	1.34	3.74	3.74
48	:		2.51	1.95	1.00	5.46	5.46
64	:	9	1.71	1.26	1.20	4.17	
64	:	10	2.72	1.54	1.46	5.72	
64	:	11	2.75	1.68	1.26	5.69	5.19
48	:		.58	.77	.88	2.23	2.23
71	:	16	1.67	1.28	1.20	4.15	
71	:	17	1.13	1.25	1.18	3.56	
71	:	18	2.23	1.49	1.36	5.08	4.26
Maximum	:		2.81	1.95	1.80	5.97	5.62
Minimum	:		.58	.77	.88	2.23	2.23
Average	:		1.90	1.45	1.33	4.68	4.57

James A. Holden



Demonstrations on Reclamation Projects.Belle Fourche

During the week ending December 13 three farm flocks of sheep were inspected for scabies and one infected flock found. Stormy and cold weather has prevented the dipping of this flock to date. There has been no recurrence of scabies in flocks of sheep dipped under government supervision. As a result the sheepmen have been convinced that the only way to eradicate sheep scab is by proper dipping, and to put the sheep business on a sound and safe basis compulsory dipping of infested flocks is urged. To meet this situation a local committee of three members is now active in securing the sanitary livestock laws from a number of States and in drafting a bill for the State legislature that will be drastic enough to compel dipping of infected flocks and the proper disinfection of yards, sheds, bed grounds, etc.

Milk samples were gathered at three farms and butterfat tests run. The roads have been heavy most of the week and only the necessary travel was made by car. Plans are under way to organize boys' and girls' livestock clubs of poultry, sheep, and pigs, also three girls' sewing clubs and an adult club in poultry.

Butterfat is bringing 39 cents per pound on the local market, No. 1 eggs 55 cents, and No. 2 eggs 50 cents per dozen.

F. E. Miller

Flathead

The weather during the week ending December 13 was very warm for this time of the year, causing practically all the snow to melt even up the mountains a considerable distance. Roads were practically impassable.

A considerable part of the week was used in moving from the old office quarters and getting established in the new office in the Ronan Hotel building.

A conference with the cow tester was held and a circular letter prepared in connection with the annual meeting to be held soon. The association is functioning very well and prospects are favorable for reorganization at the annual meeting.

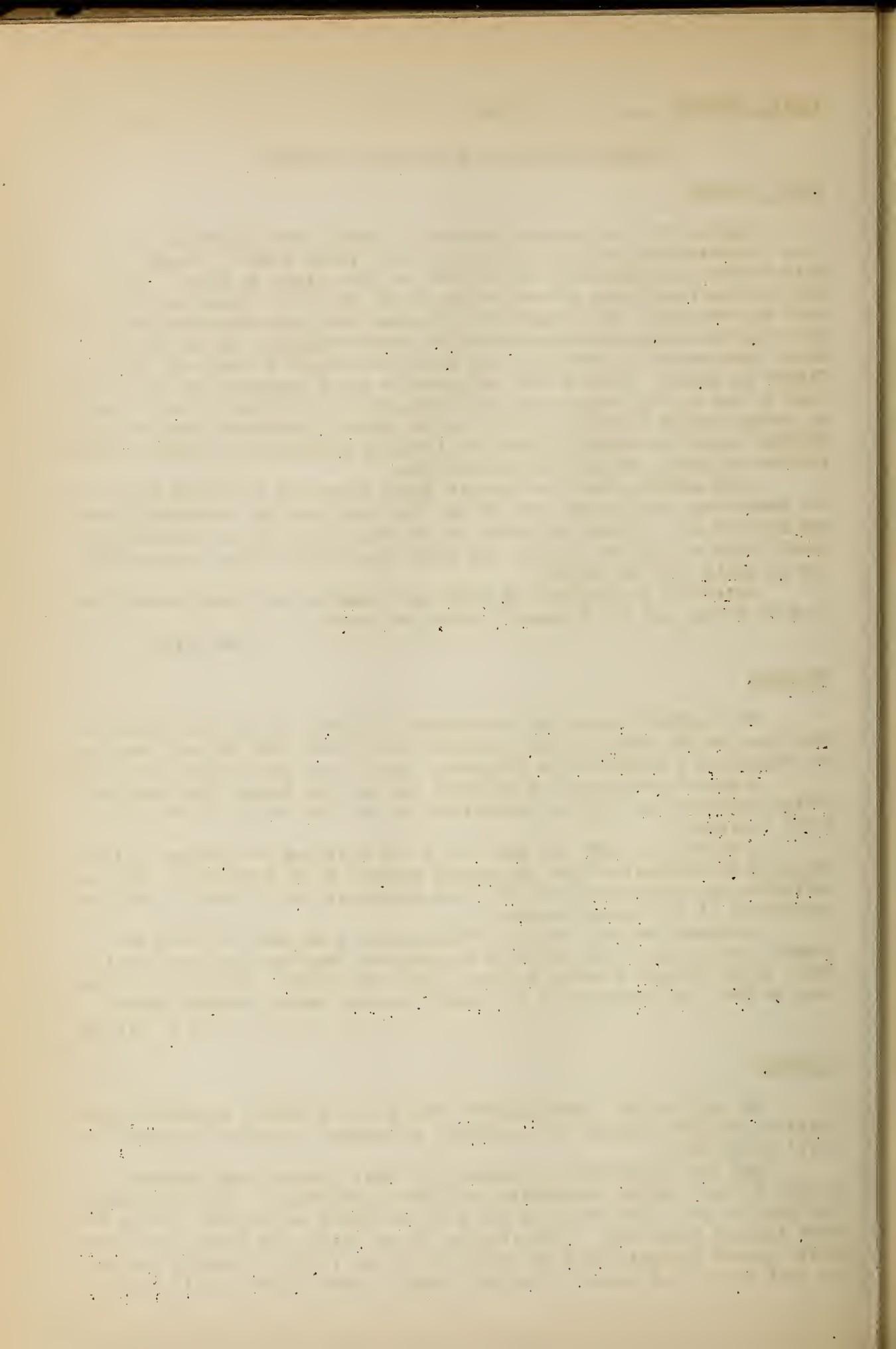
A booster meeting for the Flathead had a turnout of about 250 people. Mr. Benz of the Northern Pacific was principal speaker, while three reels of movies along the same line were shown. Efforts are being made to have the Flathead do its local boosting during Montana Month.

L. B. Miller.

Minidoka

The time of the agriculturist for the week ending December 13 was spent on poultry matters and assisting in securing purebred ewes for boys' sheep club.

One day was given to inspection of half monitor type poultry houses to check up on ventilation and floor conditions. Some complaint had come to the office that it was very difficult to keep the floors in this type of house dry. Inspection of these houses and conferences with their owners indicate that the moisture of the litter is due to the use of dirt floors not raised above the outside ground level and to lack of



Minidoka (continued)

ventilation and condensation of moisture from the air in the house. Four out of six houses visited were quite damp.

The greater part of two days was spent with Mr. D. B. Leonard, district club leader of Pocatello, for Southeastern Idaho, securing some purebred Hampshire ewes suitable for boys' club work. It was possible to find these ewes in one flock, and seventeen were selected for the work. This search revealed the fact that owners of purebred ewes do not want to sell them. There was but one flock on the project from which ewes could be secured. The sheep industry continues to be popular in the minds of project farmers.

Arrangements were made for a poultry tour in Minidoka county. It is planned to visit eight places, inspecting flocks for development and method of handling to secure egg yields.

J. T. Montgomery.

North Platte

The first two days of the week ending December 13 were devoted to the cooperative shipment of a carload of dressed turkeys from Henry and two carloads from Torrington. The three cars were bought by Swift & Company and were filled out Tuesday for the Atlantic coast.

In the shipment from Henry, the figures for which are at hand, 76 farmers delivered 2152 turkeys and received \$6,040.56. They realized from 60 cents to one dollar a bird more than the same turkeys would have brought had they been sold on the local market alive. The South Sioux Poultry Association listed most of the birds in Scottsbluff and Sioux counties, and county agent Dupertuis handled the shipment from Torrington.

Some time in February an effort will be made to ship a carload of turkeys for storage purposes. Plans are being made to have a car run through the Valley occasionally the coming year to collect live poultry, and steps have been taken toward marketing eggs collectively.

Three large flocks of hens were culled the latter part of the week and a dozen flocks are on the waiting list.

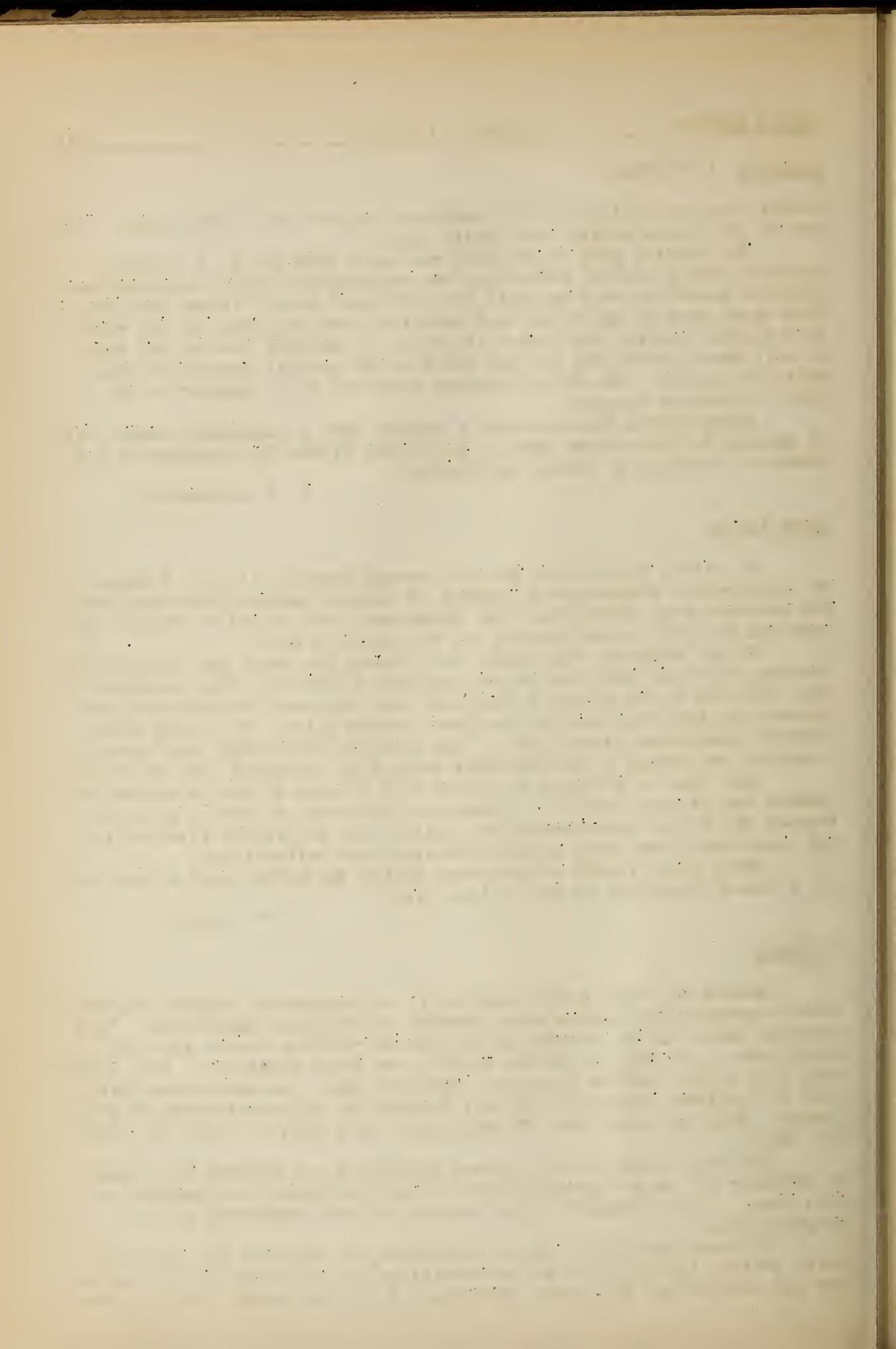
D. H. Propps

Newlands

During the week ending December 13 an outbreak of chicken pox has caused considerable concern among several of the local poultrymen. This outbreak showed up in several chicken flocks within a week's time and heavy losses occurred before the trouble was taken seriously. Some visits were made to the poultry farms and diagnosis made. An application was made to the State Veterinary Control Service for the vaccination of these flocks. This was taken care of immediately at a cost of \$8.50 for each 250 birds.

The cooperative turkey feeding experiment was brought to a close on December 10, as the grower wished to start marketing his turkeys at this time. A full account of the results of this experiment will be prepared later.

A second article on turkey production was prepared for the local press dealing largely with the possibilities for the future turkey industry and encouraging the proper selection of breeding stock for next year.



Newlands (continued)

before the best birds are put on the market.

On Thursday a trip was made to Oakland, California, to attend the Pacific Slope Dairy Show and Western dairy meetings held in connection with it. Some time was also spent in visiting the commission district to keep in touch with the holiday turkey markets.

L. E. Cline.

Uncompahgre

Three trips to Delta were necessary during the week ending December 13 in connection with the poultry show. The premium list is in the printer's hands and should have been out this week but did not appear. The Mesa County show will be held next week.

Some time has been given to the proposed shipment of ewes from Idaho. About 100 head of registered ewes and 500 head of grades are listed, but we are having difficulty in locating the stock.

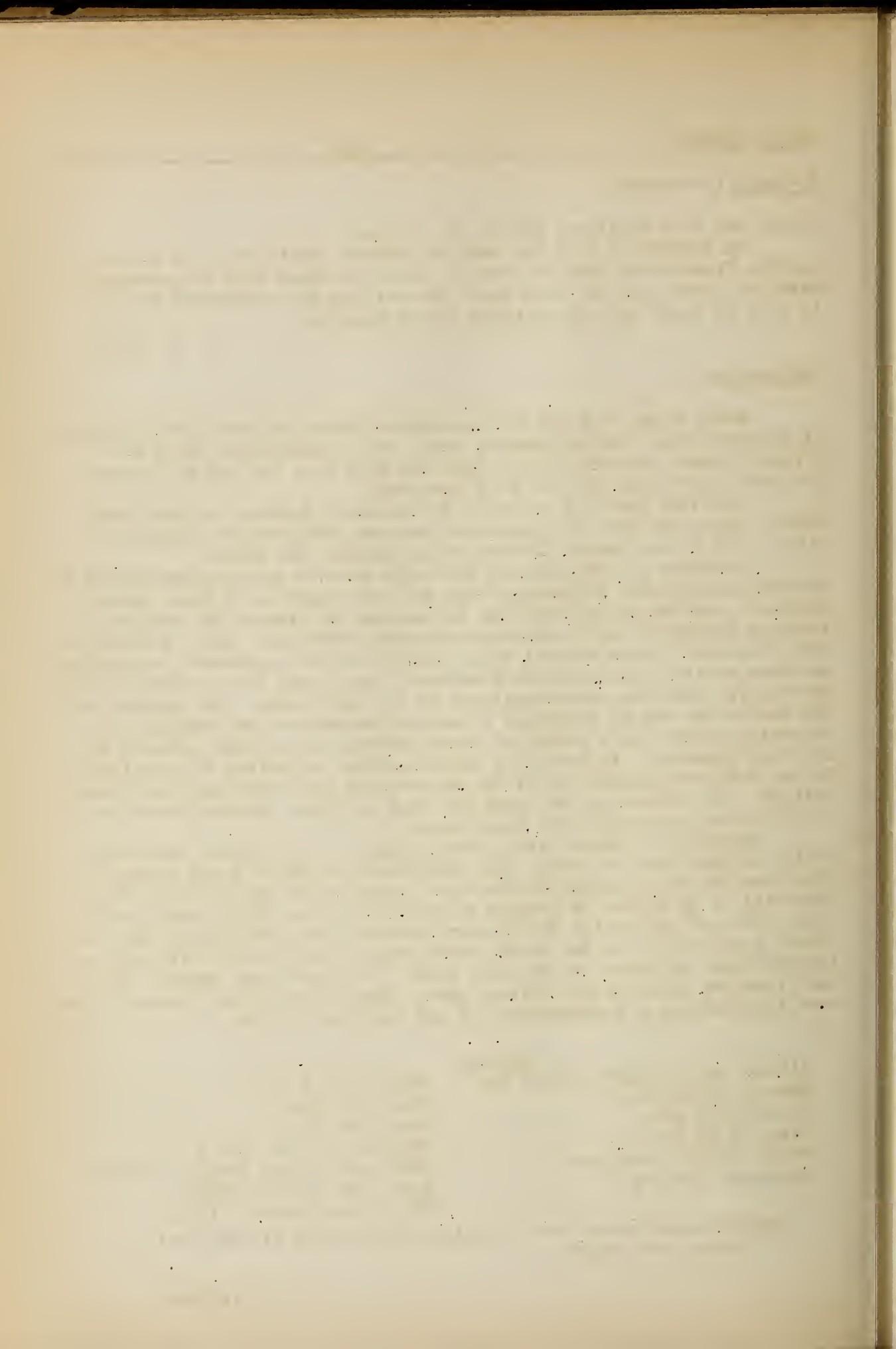
On Friday a conference of Extension workers and representatives of various agricultural industries from the four counties of Mesa, Delta, Montrose, and San Miguel was held in Montrose to discuss the present trend in production and marketing crops and livestock. After a study of data relative to this subject three committees were appointed to consider problems related especially to livestock, crops, and farm economics, respectively, and made recommendations to the conference. The purpose of the conference was to formulate a general program for the guidance of extension agents for a period of years covering the region included in the four counties. In view of a rather extreme variation of conditions in the different localities it was possible to make only general recommendations, but interest in the plan was good and those present seemed to feel that the conference was worth while.

Saturday was spent with a representative of the State Extension Office working with the boys' club demonstration team of Delta county, which won the championship of the boys' teams at the State fair. This team will go to Denver in January to demonstrate the field selection of seed corn each day during the Western National Livestock Exposition. A girls' team, which won the grand championship at the State fair, will go from Montrose to Denver at the same time. New Mexico and Wyoming will each send two teams to the Western show. These teams do not compete, but each team puts on a demonstration of its own work each day.

Markets.

Alfalfa hay in stack, \$8.00 ton	Butterfat, 56¢ lb.
Barley, \$1.50 cwt.	Eggs, 50¢ doz.
Corn, \$2.50 cwt.	Hens, 8¢, 12¢ lb.
Oats, \$1.50 cwt.	Turkeys, 18¢ lb. No. 1
Wheat, \$2.25, \$2.40 cwt.	Beef cattle, top Denver, \$8.50*
Potatoes, 65¢ cwt.	Hogs, top Denver, 49.65
	Sheep, top Denver, \$14.75

*Market much lower; this is price of warmed-up steers; choice grass beef \$7.25.



W E E K L Y R E P O R T S
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Western Irrigation Agriculture

Newlands

The meteorological data recorded at this station for the three-week period ending December 20 follows: Mean maximum 37.1, maximum 49 on December 4; mean minimum 20.3, minimum -2 on December 19. There was .03 of an inch of rainfall on December 5, .18 of an inch on December 6, and .06 of an inch on December 7, making a total of .27 inch of rain for this period.

The teamster has finished manuring the garden plats, the pasture, and plats C 7, 8, 9, and 10. The last four plats are to be seeded to grass pasture in the spring. The orchard will be manured next.

A tile drain at the north end of B 5 and 6 has been completed, which will run off the seepage water from the septic tank. At present a new shed in the horse corral is being built.

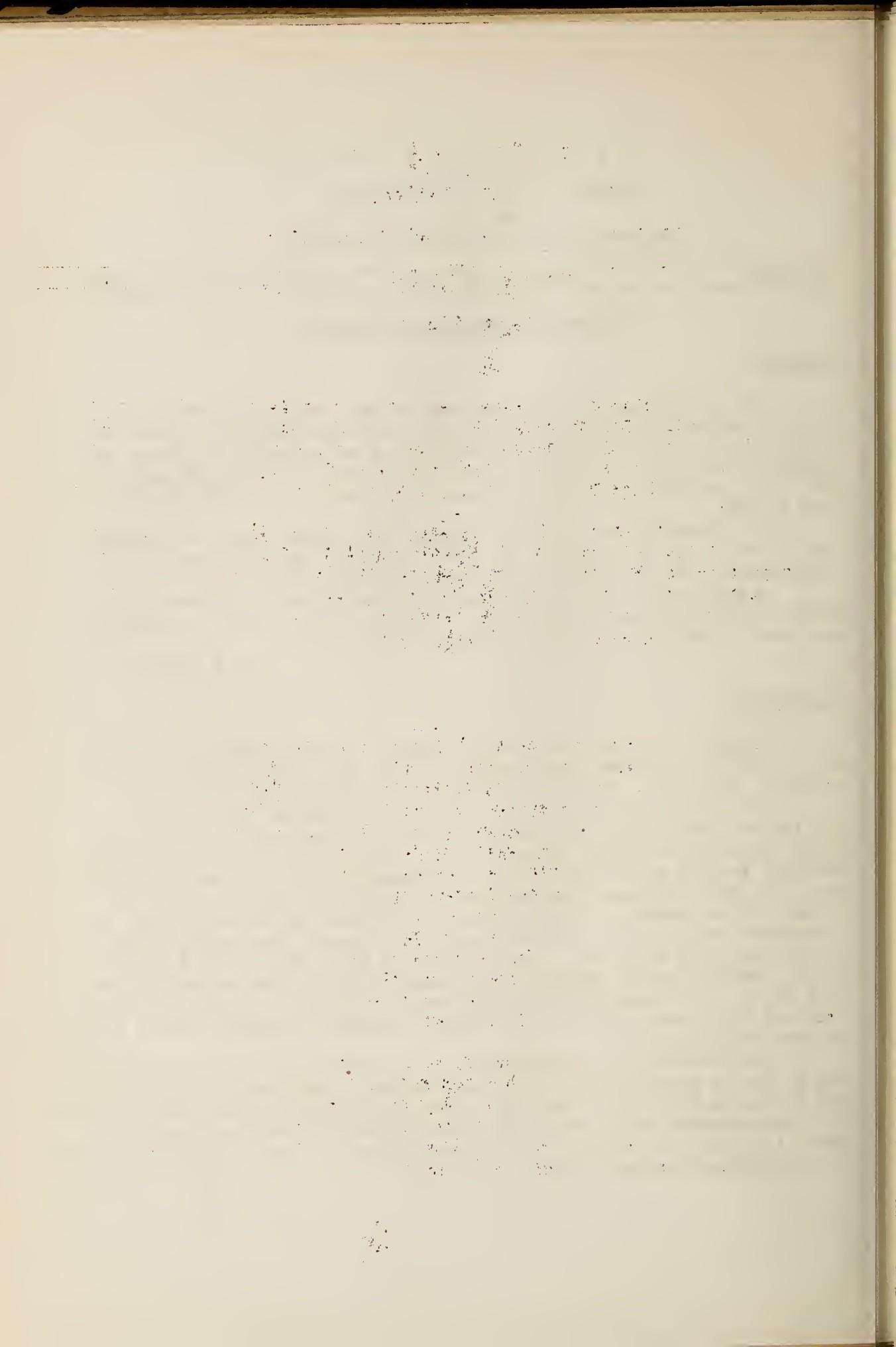
E. W. Knight.

San Antonio

During the three weeks ending December 20 the maximum temperature was 84 (Dec. 7), minimum temperature 22 (Dec. 19), and greatest daily range 49 (Dec. 18). The total precipitation amounted to 2.56 inches.

The first four days of the last week covered by this report a continuous strong south wind prevailed and the temperature remained between 70 and 80 degrees. Thursday night, about 11 o'clock, the wind very suddenly shifted to the northeast; occasional flurries of snow and sleet fell; and the temperature dropped from 71 degrees to 29 degrees by 8 o'clock Friday morning. There was no inclination for the mercury to rise throughout Friday and by Saturday morning a minimum temperature of 22 degrees had been recorded. Sleet, snow, and rain, which fell Saturday night, resulted in the formation of a mantle of ice from one-half to one inch thick. The storm increased in severity toward the east, and it is reported that large numbers of livestock died from exposure between San Antonio and Houston.

The first rain of consequence since September occurred December 1 and 2, when a total of 2.4 inches was recorded. This was sufficient to wet the large clods left from fall plowing and permit working the seed-bed down for planting oats. Teams were started on disk and drag harrows as soon as possible after the rain, followed closely by the grain drill. The following plantings were made as indicated:



San Antonio (continued)

<u>Planting</u>	<u>Field</u>	<u>Date Planted</u>	<u>Date Emerged</u>
Oats (Texas Red Rustproof)	Rotation plats	Dec. 8	Dec. 17
Oats (Selection 1913)	B-3, C-3	Dec. 12	
Small grain variety test	C-6	Dec. 11 & 12	Dec. 17 to 20*
Flax variety test	B-4	Dec. 9	Dec. 17 - 17
Flax nursery	B-4	Dec. 10	Dec. 16 to 19
Flax - time of planting	B-3	Dec. 12	
Biennial Sweet Clover	A-3	Dec. 13	
Biennial Sweet Clover	E-3	Dec. 13	

*Two varieties of wheat not up by December 20.

In addition to the field operations incident to making the plantings specified, farm labor has been kept busy plowing fields C-4, C-5, and D-4, shelling corn, cleaning and fumigating planting seed, grinding feed, and general repair of buildings and equipment.

Geo. T. Ratliffe.

Scottsbluff

The week ending December 20 has been extremely cold. It opened with very mild weather. On the afternoon of the 15th the thermometer registered 67 and dropped to zero that night. The average maximum has been 19, with a maximum of 67 on the 15th; the average minimum was -6, with a minimum of -22 on the nights of the 18th and 19th. About an inch of snow accompanied the drop in temperature.

The work of the Station has been miscellaneous such as feeding and caring for stock, working on the turkey shed at the poultry plant, etc.

The campaign at the sugar mills in the valley is drawing to an end. The plant at Mitchell will be through slicing on the 21st and will finish about a week later. The Great Western Sugar Company has announced the payment of an additional dollar on the 1924 contract for December 22. This makes a total payment of \$6.50 on this year's contract.

James A. Holden.

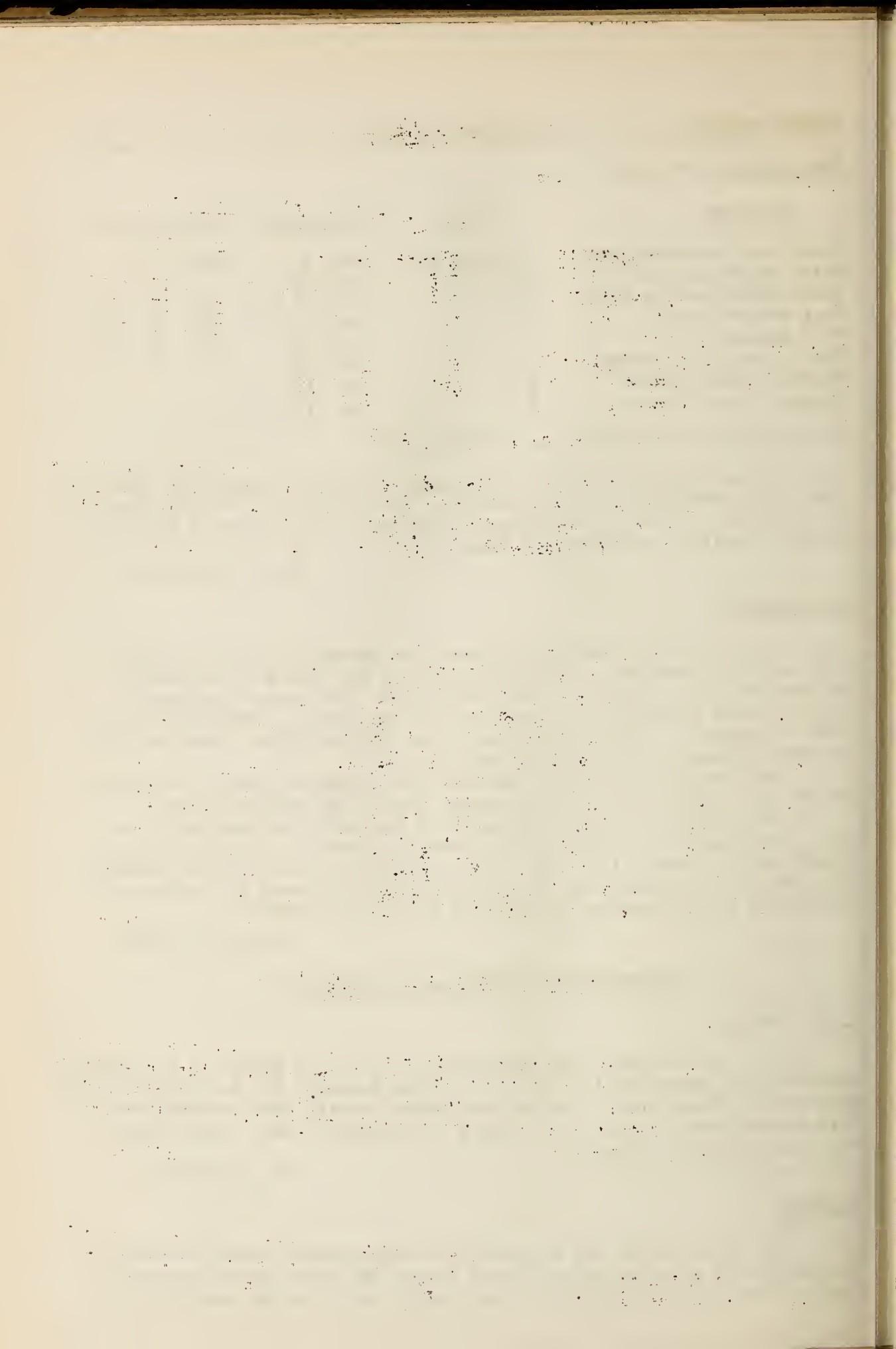
Demonstrations on Reclamation Projects.Belle Fourche

Very cold weather with rough frozen roads made travel by automobile impracticable during most of the week ending December 20, but one-half day was spent in field work. Work on the annual report, milk records, and farm census data took up most of the agriculturist's time. Milk tests were run for three farmers.

F. E. Miller.

Flathead

The severe storm and extremely low temperatures reported general throughout the northern United States during the week ending December 20 visited the project with 30 below zero and a gale. On the east side of



Flathead (continued)

the continental divide, about 200 miles from here, temperatures of 56 degrees below were reported, indicating that the Flathead Valley, though cold, upheld its reputation of being comparatively mild in climate. According to data at the office of the project engineer, this low temperature has been equaled only once since records have been kept. Weather continued cold throughout the week.

With the exception of one day, all of the week was spent at the office. Preliminary tabulation of data for annual report and tabulating information from the Tuberculosis Eradication forms No. 22 took up a considerable part of the time. This latter information constitutes a rather complete census of cattle on the project.

The compilation of a weekly local market report was initiated this week. Attention was given the work of the cow tester; and all the pig club contestants were written letters and supplied with timely information.

Butterfat is 40 to 42 cents; eggs, 60 cents; ranch butter, 40 cents.

L. B. Miller.

North Platte

Cold and stormy weather prevailed during most of the week ending December 20. The temperature got down to 22 degrees below on a couple of nights.

The first part of the week a trip was made to Torrington with a local farmer to look at some Holstein cows for sale. Six cows and heifers were purchased.

Flocks were culled on three farms. About 600 hens were handled and 175 culled out.

D. H. Propps.

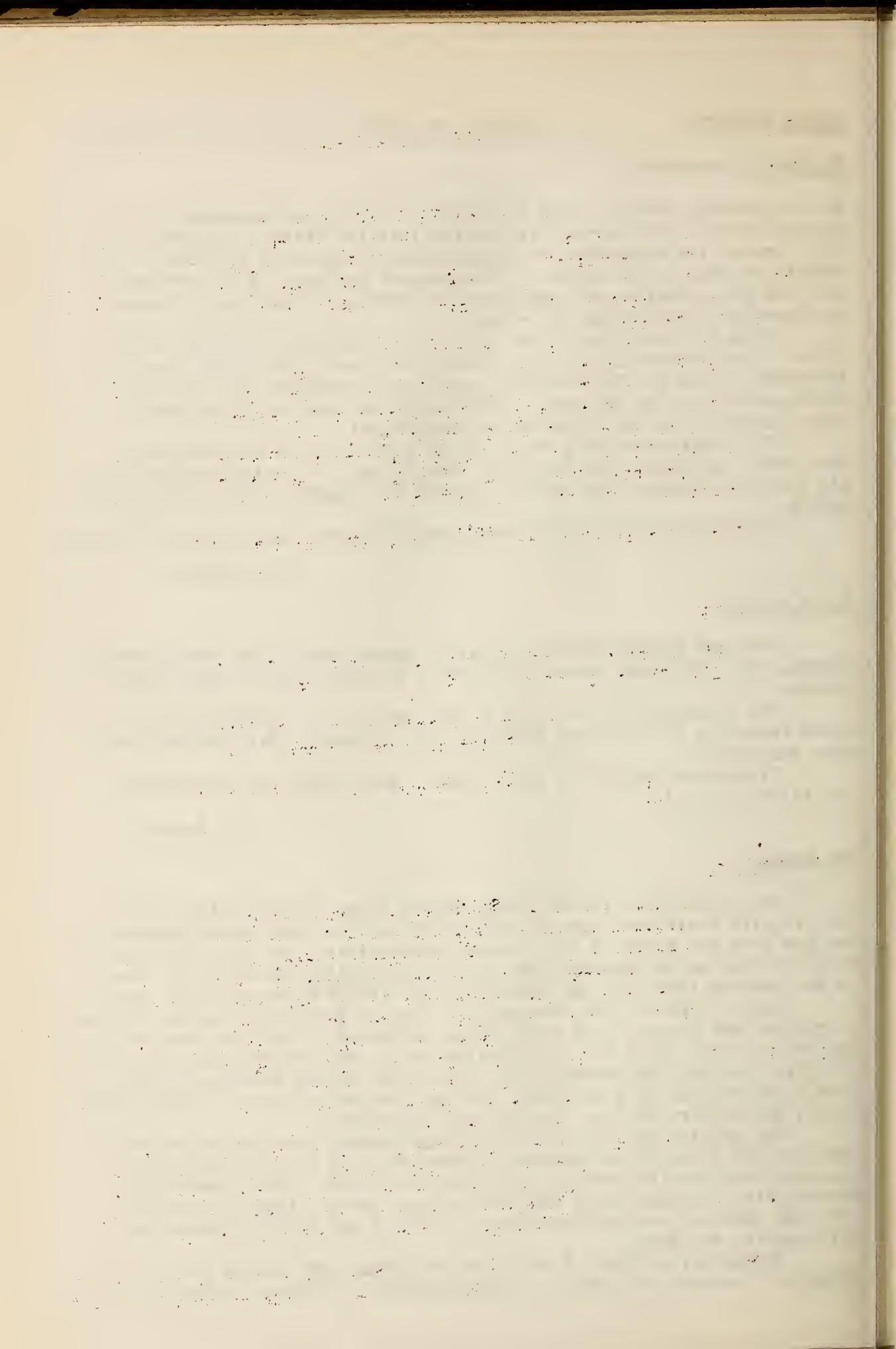
Uncompahgre

In cooperation with the Smith-Hughes class of the Montrose high school, milk tests were run for ten men during the week ending December 20. One new herd was taken on for regular monthly tests, and one or two others will be taken up in January. The average production for December, based on the one-day test, was 724 pounds of milk and 34.4 pounds of fat per cow.

Five flocks of hens were culled. Two of these were mongrel flocks, poorly fed and housed, from which about one-third of the hens were sold. The whole flocks could have been called culls, but owners were advised regarding feeding and eradication of lice, and it was suggested that a more rigid culling be done later. On one farm where cocks of three different breeds were used two breeds were eliminated.

The Poultry show of the Mesa County Poultry Association at Grand Junction was attended on Thursday. Although fewer entries than were expected were received the exhibits were very good. Three hundred and seventy-five chickens and a few turkeys were shown, classes being made for both standard and utility birds. Lectures and demonstrations were given during the show.

The annual meeting of the Montrose County Farm Bureau was held on Saturday. Reports of committees and election of officers occupied all the



Uncompahgre (continued)

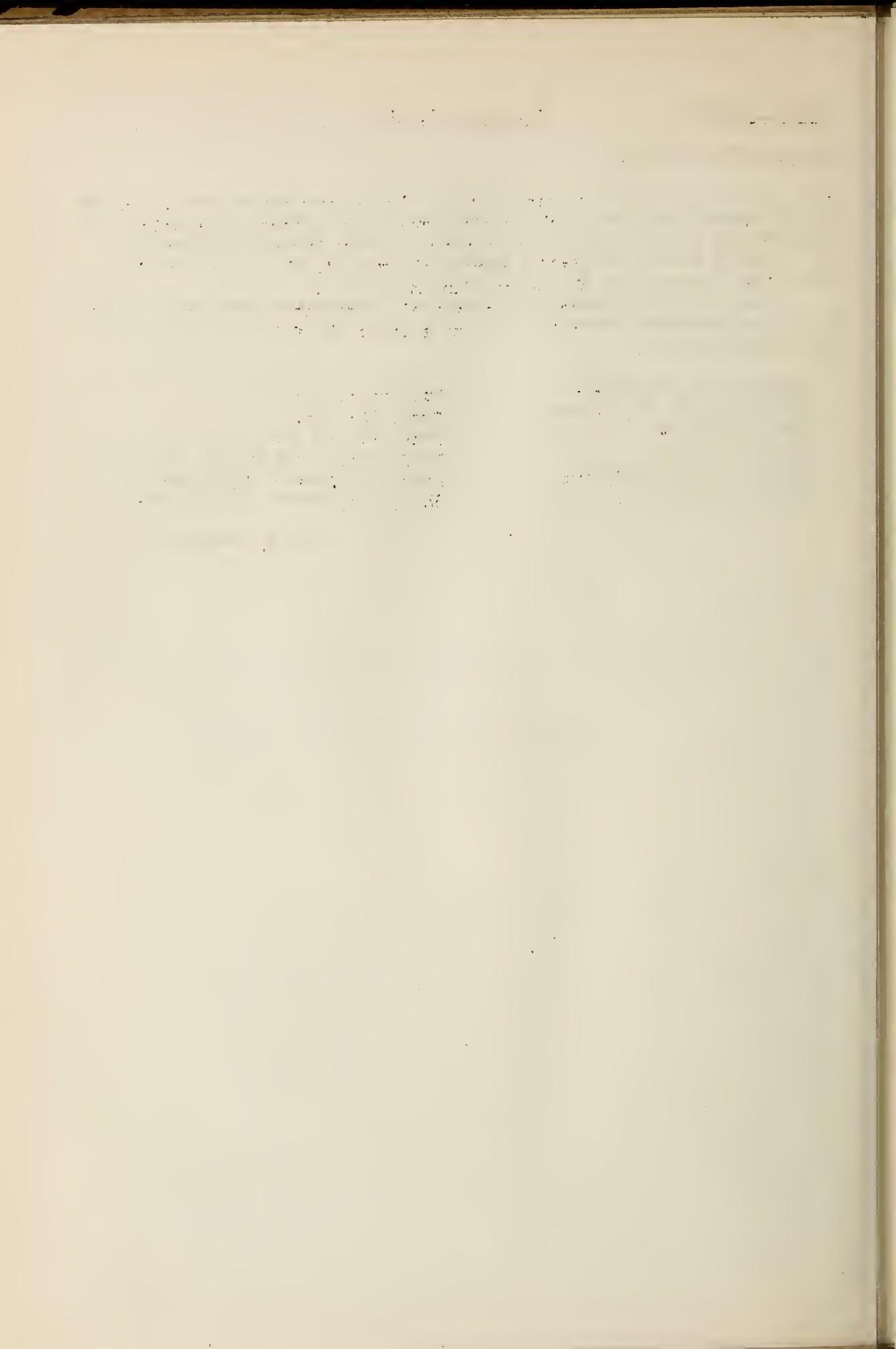
time, and an adjourned meeting for December 27 was agreed upon. Though the attendance was small, the meeting was characterized by a spirit of optimism and a determination to revive the Farm Bureau organization.

Light snows have fallen during the week in the valley and heavy falls have occurred in the surrounding mountains.

Markets have advanced on nearly all commodities this week. Local prices are somewhat unsettled on some things; the following shows the approximate prices.

Alfalfa hay, \$8.00 ton	Butterfat, 37¢ lb.
Barley, \$1.50, \$1.75 cwt.	Eggs, 50¢ doz.
Corn, \$2.75 cwt.	Hens, 8¢, 12¢ lbs.
Oats, \$1.75 cwt.	Beef cattle, top Denver, \$8.50 cwt.
Wheat, \$2.50, \$2.75 cwt.	Hogs, top Denver, \$10.00 cwt.
Potatoes, 65¢ cwt.	Sheep, top Denver, \$15.25 cwt.

H. A. Ireland.



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Western Irrigation Agriculture

San Antonio

During the last eleven days of December the following meteorological data were recorded: Maximum temperature 65, December 31; minimum 21, December 25; greatest daily range 26, December 30; precipitation .11 inch. Six days were cloudy, four partly cloudy, and one clear.

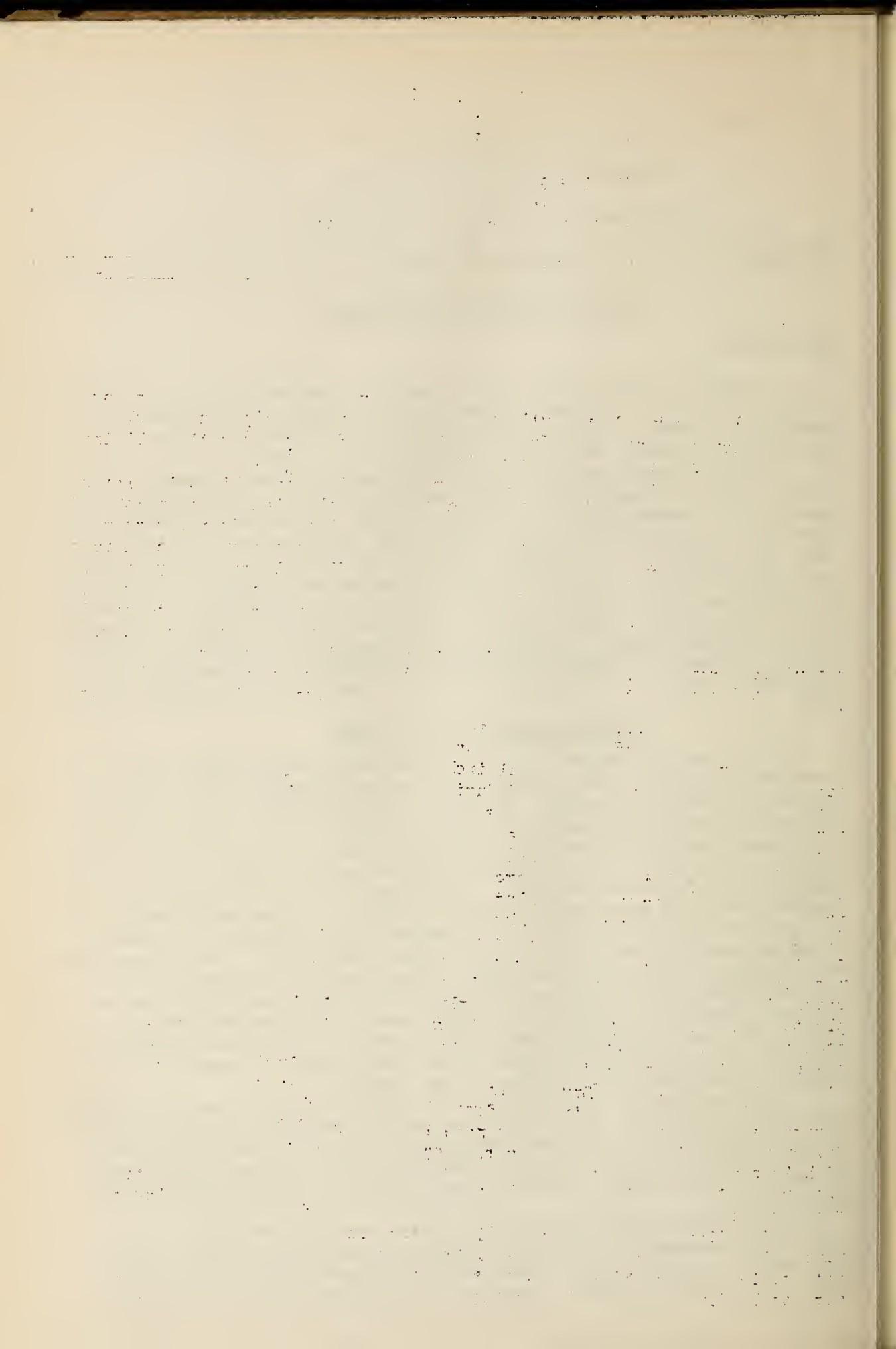
The low temperatures of December 18 and 19 froze all small grains to the ground and completely killed practically all flax plants which had emerged. The continuously cold weather which followed made recovery very slow and at the end of the month only enough green was showing to indicate that the plants were still alive. Not all the flax plants of any of the varieties had emerged at the time of the freeze and subsequent emergence has furnished enough plants to make stands which vary from poor to excellent. Temperatures below freezing, which have occurred during the period covered by this report, seem not to have affected the flax other than to retard its growth. Canadian field peas, planted for green manure, have been kept frozen to the ground and fully 60 per cent of the stand is now dead.

Climatological Review of 1924

The year 1924 started with an abundance of soil moisture, due to continuously rainy weather during November and December 1923. Rainfall was only moderate in January, .81 inch, and fall plowing, which had been very much delayed, was completed during this month. The mean temperature for January was 45.6 degrees F. as compared with an 18-year average mean of 52.0. This is the lowest mean January temperature since 1907, with one exception (45.0 degrees in 1918). Flax stands were seriously reduced by freezing when the temperature dropped to 20.5 the nights of January 5 and 6. Small grains grew slowly, but no "winter-killing" occurred. Temperatures remained subnormal throughout February and March. Corn and sorghums were planted in early March as usual. Grain sorghum seed rotted in the ground because of the cold, wet condition of the soil and had to be re-planted. Corn, hay sorghums, and Sudan grass emerged to satisfactory stands, although germination and early growth were very much retarded by the cold. The last killing frost in the spring occurred March 13 when a minimum temperature of 30.0 degrees was recorded.

Cotton planting was done April 14 to 19, inclusive, under generally favorable conditions. Drying winds prevailed for several days immediately following planting, and in some few places where the seed had been only lightly covered the moisture was rapidly dissipated before germination occurred. These "skips", however, emerged to good stands following subsequent rains.

The first washing rain in 15 months occurred April 25. A strong wind which accompanied this rain caused corn and the more rankly grown oats to lodge quite badly. Corn recovered in good shape, but the oats were still down at harvest. Rains the latter part of May and first of



San Antonio (continued)

June damaged flax and some small grains which had been harvested and were in the shock. Rainless weather from June 2 to 19 furnished ideal conditions for harvesting the major portion of the small grain crop and for all threshing operations. The largest oat yield in the history of the station and very satisfactory yields of other small grains were secured, notwithstanding the severe lodging of oats and late planting of other grains.

A three-day rain, June 20 to 22, which totaled 4.55 inches, ended the effective precipitation for the crop season of 1924. Not so much as a trace of rain occurred from June 24 to September 2 (70 days), the longest/drought since the establishment of this station. A shower of only .07 inch broke this rainless period, and the first rainfall of consequence did not occur until September 11, when a three-day series of local showers produced a total of 1.98 inches. This rainfall temporarily relieved cultivated crops and pastures. No further rains of consequence occurred until December 1 and 2 when 2.40 inches were recorded. During the remainder of December only .27 inch of rainfall was recorded, and this came in such widely separated, small showers as to be of no agricultural value. The total rainfall for the first six months of the year amounted to 18.87 inches, 5.21 inches more than normal for the 18 years - 1907 to 1924, inclusive. The total rainfall for the last six months of the year was 5.23 inches, 7.85 inches less than normal for the past 18 years.

Mean monthly temperatures were below the 18-year average (1907 to 1924, inclusive) for January, February, March, May, July, September, and December, while for the other five months they showed some excess. The mean temperature for the year was 68.0 compared with 68.6 as the average mean for the 18-year period. The lowest temperature for 1924 occurred January 5 and 6 when the thermometer dropped to 20 degrees. The maximum temperature for the year was 104 and was recorded for August 25. This is the highest temperature recorded at the San Antonio Experiment Farm since July 19, 1918. Temperatures of 32 degrees or less were recorded on 29 days, and 100 degrees or more on 19 days, during 1924.

Wind which accompanied a rainstorm April 25 caused corn and small grains to lodge quite badly. No other winds of a harmful velocity occurred in 1924. There were no hailstorms of damaging proportions during the year.

Geo. T. Ratliffe.

Demonstrations on Reclamation Projects.Minidoka

During the week ending December 20 two interesting visits were made at the office by Mr. Wm. Bolen, the District Club Leader of the Extension Division of the University of Idaho, and Mr. W. S. Murdock of the Dairy Bureau of the United States Department of Agriculture. Mr. Bolen and the agriculturist discussed club possibilities on the Minidoka Project for 1925 and planned calf, sheep, and pig clubs.

On Friday Mr. Bolen, Mr. Murdock, and County Agent Barber conferred with the agriculturist on club work and the dairy situation on the Minidoka Project. Mr. Bolen thinks that the project offers an excellent opportunity for successful club work, and the prospects for the 1925 clubs are bright. The dairy club for 1924 finished its year in fairly good shape. Most of the calves were well developed and made a good showing. Only one boy in the club lost one of his calves.

One day was spent in locating breeding turkeys of different varieties for settlers whose farms are located near each other. An effort is being made to breed different varieties for the promotion of peace and good will when marketing time comes in the fall.

The remainder of the week's time was spent on matters pertaining to the annual report.

Practically all of the time of the week ending December 27 was spent on the annual report and matters connected with it.

The project experienced some of the coldest weather that settlers remember. The Reclamation Service reports the lowest temperature 27° below. For practically the whole week the mercury hovered about the zero point.

Much snow and cold weather brought in all the range ewes, which will be kept in winter quarters on the project. Most of the flocks come in in pretty good shape. Some have been held out too long on scanty feed. A good ewe is worth more money than a beef cow. Choice purebred ewes are held at \$35 to \$50. Beef cows are worth two to four cents a pound.

John T. Montgomery.

North Platte

The week ending December 27 was devoted to finishing up a few details on the annual report, and some poultry work was done in the field.

The New York embargo against live poultry from Nebraska and other states in the middle West is having a decidedly depressing effect on local markets. Many local dealers have quit buying entirely and others have cut the price materially. In the valley no unusual poultry disease has been noticed. Authorities at the College of Agriculture at Lincoln say that nothing out of the ordinary has been brought to their attention in the way of poultry diseases in the state.

D. H. Propps

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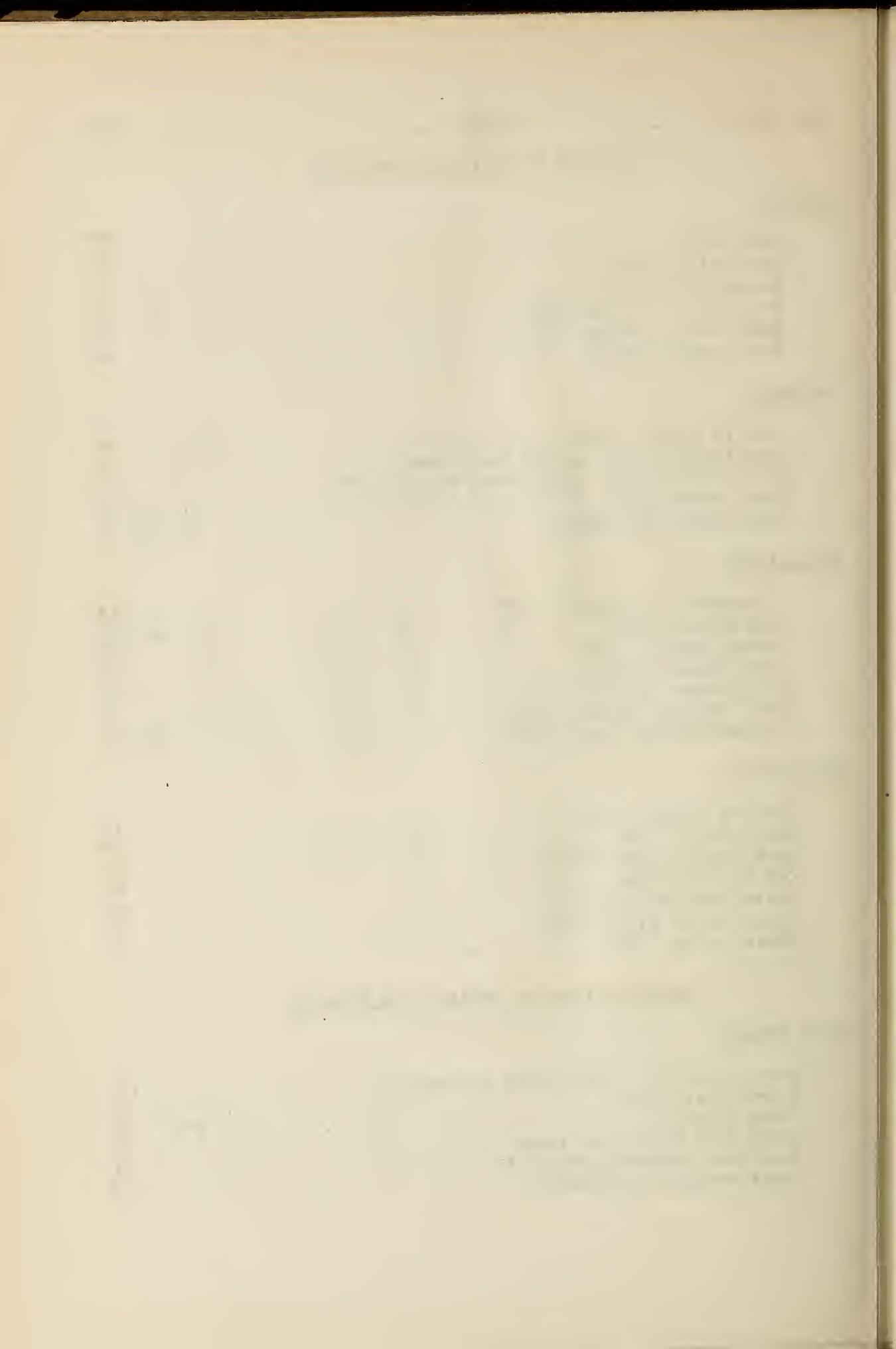
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